XXVIII

REPORT OF THE DIRECTOR FOR THE YEAR 1924

By BARTON WARREN EVERMANN
Director of the Museum and of the Aquarium

The annual report of the Director for the year 1923 was presented to the Academy at the annual meeting, February 20, 1924.

During the year 1924 the activities of the Museum continued satisfactorily and without notable change. Additions to the Museum exhibits, the research collections, and the library were many. A number of improvements in certain exhibits and in laboratory equipment were made.

Personnel

The personnel of the Museum staff has undergone some changes in the year. Assistant janitor, George W. Edwards, became ill early in June and has not been able to resume his duties. Assistant janitor, Frank Yale, has been in poor health for most of the year, and has not been able to perform his duties since October. He was on October first given leave with full pay until December 31, 1924.

The sad death of Dr. John Van Denburgh, at Honolulu, October 24, was an irreparable loss to the Academy. The vacancy caused by his death has not as yet been filled.

The employes of the Academy on January first, 1925, were as follows: Dr. Barton Warren Evermann, Director and Executive Curator of the Museum, Editor of the Academy publications, Director of the Steinhart Aquarium, and Acting Secretary to the Board of Trustees since May first, 1924; W. W. Sargeant, Secretary to the Board of Trustees, absent on leave since May first, 1924; Miss Susie M. Peers, Secretary to the Director and Assistant Acting Secretary to the Board of Trustees since May first, 1924; Joseph W. Hobson, Recording Secretary; Mrs. Constance W. Campbell, office assistant, part time; Raymond L. Smith, office assistant; Miss Alice Eastwood, Curator, and Mrs. Kate E. Phelps, and Miss Clara

Tose, assistants, Department of Botany; Edward P. Van Duzee, Curator, Dr. F. R. Cole, Curator in Dipterology, and J. O. Martin, assistant, Department of Entomology; Joseph A. Slevin, Assistant Curator, Department of Herpetology; Dr. G. Dallas Hanna, Curator, and Eric Knight Jordan, Assistant Curator, Department of Paleontology; Joseph Mailliard, Curator, and Miss Mary E. McLellan, Assistant Curator, Department of Ornithology and Mammalogy; Dr. Walter K. Fisher, Curator, Department of Invertebrate Zoology; Frank Tose, Chief Taxidermist, James F. Campbell, Russell Hendricks, Chandler Smith, Cecil Tose, Ralph Keating, Douglas Kelly, and J. T. Wright, student assistants, Department of Exhibits; Edward P. Van Duzee, Assistant Librarian, and Miss Margaret Dold, Library Assistant; Wm. C. Lewis, janitor, Frank Ashworth, assistant janitor; Mrs. Johanna E. Wilkens, charwoman; Miss Mabel E. Phillips, checkroom attendant; J. H. Kavanaugh, day watch; Archie McCarte, night watch.

Accessions to the Museum and Library

The Accessions to the Museum and to the Library have been numerous and valuable. An itemized list will be found in the appendix to this report (pp. 479-487). A few of the more notable are mentioned in the President's report (p. 439).

Cooperation with Public and Private Schools, with Other Institutions, and with Individuals

The Academy continues to assist the schools in various ways, chiefly through loan of specimens of birds, mammals, insects, mollusks, and small habitat groups, and by public lectures. It also cooperates with other institutions and individuals as in the past.

Loans of Specimens made by the California Academy of Sciences during 1924:

January 5. 22 specimens of stone flies to Prof. P. W. Claassen, Cornell University, Ithaca, N. Y.

January 7. 34 moths to Dr. Wm. Barnes, Decatur, Ill.

January 8. 336 beetles from the Gulf Expedition material to Dr. F. E. Blaisdell, Sr., San Francisco, Calif.

January 12. 2 specimens of Phalium, Loc. 200, to Hubert Schenck, Instructor Paleontology, University of California.

February 1. 26 specimens of Noctuids to Foster H. Benjamin, Decatur, Illinois.

February 5. 119 Epeoline bees to Prof. T. D. A. Cockerell, University of Colorado, Boulder, Colo.

February 8. 33 specimens of Fucellias (kelp flies) to Dr. J. M. Aldrich, U. S. National Museum, Washington, D. C.

February 25. 1 specimen of Monardella tomentosa to Dr. J. M. Greenman, Missouri Botanical Garden, St. Louis, Mo.

February 26. 5 groups (3 bird and 2 mammal) to Berkeley Public Schools, Berkeley, Calif.

February 29. 24 specimens of Lepturid beetles to Mr. Ralph Hopping, Forest Service, Vernon, B. C.

March 6. 30 specimens of birds to Miss Sarah Wafer, 2430 Jackson Street, San Francisco, Calif.

March 10. 8 bird eggs and 4 nests to Miss Sarah Wafer, 2430 Jackson Street, San Francisco, Calif.

March 28. 25 shells to I. Magnin & Co., Grant Ave. and Geary Streets, San Francisco.

May 3. 8 birds from Regular Collection and 51 birds from School Collection to Miss Ethel Crum, Mt. Diablo Union High School, Concord, Calif.

May 23. 24 mouse traps to Mr. Classen, Associated Oil Co., Kanataka, Alaska.

June 30. 10 specimens of Melospiza (birds) to Mr. A. Van Rossem, 514 Lester Avenue, Pasadena, Calif.

July 17. 502 specimens of bees to Prof. T. D. A. Cockerell, University of Colorado, Boulder, Colo.

July 17. 219 Osmias (bees) to Grace Sandhouse, Cornell University, Ithaca, N. Y.

September 8. 2 bird eggs to Miss Findley, San Francisco Teachers' College, San Francisco, Calif.

September 12. 94 lots of marine shells from Gulf of California collection to Dr. Fred Baker, Point Loma, Calif.

September 23. 101 specimens of Rubus (plants) to Dr. L. H. Bailey, Ithaca, N. Y.

September 30. 12 speciments of Epeoline bees from Arizona to Prof. T. D. A. Cockerell, University of Colorado, Boulder, Colo.

October 10. 296 specimens of minute mollusks from Gulf of California Expedition to Dr. Fred Baker, Point Loma, Calif.

October 11. 6 specimens of ferns to Wm. R. Maxon, U. S. Department of Agriculture.

October 13. 32 specimens of Hydrochus (water beetles) to J. O. Martin, 2826 Kelsey Street, Berkeley, Calif.

OCTOBER 16. 144 specimens of Tahinid flies to Dr. J. M. Aldrich, U. S. National Museum, Washington, D. C.

OCTOBER 16. 550 lots of marine shells from Gulf of California Expedition to Dr. Fred Baker, Point Loma, Calif.

OCTOBER 18. 152 lots of marine shells from Gulf of California Expedition to Dr. Fred Baker, Point Loma, Calif.

OCTOBER 29. 26 specimens of birds to Miss Edith Newton, Cogswell School, San Francisco, Calif.

NOVEMBER 1 60 moths from Arizona to Dr. Wm. Barnes, Decatur, Illinois.

NOVEMBER 4. 40 specimens of plants from Palmer's Mexican collection of 1910 to Paul C. Standley, Smithsonian Institution, Washington, D. C.

NOVEMBER 12 8 specimens of salamanders to Dr. Emmet R. Dunn, Smith College, Northampton, Mass.

NOVEMBER 17. 3 specimens of Boraginaceæ to Ivan M. Johnston, Gray Herbarium, Cambridge, Mass.

NOVEMBER 18. 2 specimens of birds to Miss G. M. Findley, San Francisco Teachers' College, San Francisco, Calif.

NOVEMBER 25. 155 specimens of Diptera to Mr. C. Howard Curran, Department of Agriculture, Ottawa, Ont.

VISITORS TO THE MUSEUM

The number of visitors to the Museum in 1924 totaled 646,033, the greatest in its history. This is very gratifying, as it indicates not only sustained interest in the Museum but increased appreciation of its scientific and educational value.

The number of visitors by months and years since the opening, September 22, 1916, is shown in the following table:

Month—	*1916*	*1917*	*1918*	*1919*	*1920*	*1921*	*1922*	*1923*	*1924*
January.....	.....	23170	25260	17241	27013	25755	19038	15270	32364
February....	.....	22058	23698	17586	23450	25679	18534	20529	44439
March.....	.....	31606	26810	27397	25419	28279	27922	26341	39935
April.....	.....	32175	23274	25994	32208	24939	36057	21911	41332
May.....	.....	26154	26391	28369	37107	25517	27237	37597	48152
June.....	.....	32123	29843	32248	36207	29406	27131	39511	58281
July.....	.....	37193	31420	48028	52492	43186	36263	64530	91329
August.....	.....	24619	31137	43730	53470	39422	34787	50849	105130
September...	16448	27866	29847	34007	42013	31458	28408	69870	82814
October.....	36933	20629	14743	30463	33500	24861	19459	66894	43074
November....	27718	21810	8531	25246	19347	18593	19080	48766	37611
December....	15002	21693	19588	21188	21340	15062	13339	36707	21572
Total.....	96101	321096	290542	351497	403566	332157	307255	498775	646033

The number of teachers and students who come to the Museum to make use of our research collections increases each year, as does also the number of pupils with their teachers who come to study the habitat groups and other exhibits in the exhibition halls.

SCHOOLS THAT VISITED THE MUSEUM IN 1924: San Francisco City and County

Date 1924	School	Grade	No. of Pupils	Teacher
Jan. 23	Le Conte	6	63	Mrs.Clayton,Hamilton
Feb. 3	Blue Bird Group, C. F. G		17	
Feb. 5	Monroe	5	31	M. Wanz
Feb. 5	Monroe	5-B	30	R. Clyde
Feb. 21	Washington	1, 2, 3	11	K. S. Weiler
Feb. 22	St. Charles School	7	17	Sister M. Niceta
Feb. 29	Haight	4	66	J. E. White
Mar. 1	Presbyterian School	7, 8	15	B. D. Low (Mrs.)
Mar. 6	Portola	3A, 3B	17	M. Eddie, C. Monte
Mar. 6	Grattan	7A	8	E. Fahey
Mar. 6	Denman	5B	34	K. Kengla
Mar. 6	Farragut	6A	35	M. Spencer
Mar. 6	Farragut	6B	35	B. Beebe
Mar. 7	Hearst	8B	24	Mrs. Gibson
Mar. 7	Parkside	8A, 8B	18	M. Pollock
Mar. 7	Lincoln	8B	25	M. Turner
Mar. 7	James Lick	7B	31	L. M. Kinney
Mar. 7	James Lick	7B	33	M. M. Torpey
Mar. 8	Union High	8B	11	Miss Gibson
Mar. 8	Telegraph Hill Settlement		29	H. Avery
Mar. 10	Denman	7A	40	Esther Lawrence
Mar. 11	Buena Vista	4	12	O. Hildreth
Mar. 13	James Lick	8A	29	C. M. Weeber
Mar. 13	Farragut	2A, 2B	33	S. E. Harris
Mar. 13	John Swett	1A, 1B	25	J. T. O'Keefe
Mar. 13	John Swett	1A	30	Miss Murray
Mar. 13	John Swett	1B	29	Mrs. A. Alderson
Mar. 13	Buena Vista	4	13	O. Hildreth
Mar. 13	Washington	7A	40	W. McCullough
Mar. 14	Denman	7B	34	R. Harby
Mar. 14	Farragut	2B, 3A	22	A. Fitzgerald
Mar. 14	Jean Parker	5A	40	D. Parker
Mar. 14	John Swett	2A, 2B	75	Miss Mair Miss McCarthy
Mar. 14	Glad Tidings Bible Institute		100	H. E. Alford
Mar. 14	Jean Parker	5A, two 6A's	100	Mrs.M.Valsangiacomo A. B. Titus D. J. Parker
Mar. 14	Crocker	8A	15	C. A. Davis
Mar. 14	Emerson	5, 1, 3	35	A. Pierson
Mar. 17	James Lick	8A, 8B	62	M. McQuilkin C. Manning
Mar. 18	Lincoln	2	24	E. Patterson
Mar. 18	James Lick	8B	40	M. Cavanagh
Mar. 19	St. Joseph's Academy	5, 6, 7, 8	50	Brother Joseph
Mar. 20	Emerson	5A	35	I. Batiloro
Mar. 20	Polytechnic High	L-3, Chem	12	Hendrich
Mar. 21	McKinley	3B	12	I. Smith

Date 1924	School	Grade	No. of Pupils	Teacher
Mar. 21	Roosevelt	5A	10	E. Colrel
Mar. 21	Crocker	8	30	C. A. Davis
Mar. 22	Presbyterian Church	Boy's Choir	12	
Mar. 29	Galileo High School			Fred W. Koch
April 7	Garfield	2A, 2B	61	A. Sandell, J. Ahern
April 7	Girls' High School	1B	10	E. M. Reeves
April 7	Lincoln	5B	35	Ethel Linton
April 7	California College of Pharmacy		110	Dr. H. B. Curey
April 8	John Swett	Foreign	7	M. Inglia
April 9	James Lick	5A, 5B	46	M. Pierson
April 9	Patrick Henry	5A, 5B	31	C. S. Hunt
April 9	John Swett	1B	24	Mrs. A. Alderson
April 10	Franklin	7A	24	C. Seidken
April 11	Sherman	3	34	N. Sullivan
April 11	Lowell High	Science class	100	G. Kast
April 11	Adams	1B	18	E. Edmann
April 12	Dunham	5, 6, 7	14	Mrs. N. Jewell
April 24	St. Charles	2, 3, 4	19	Srs. Monessa, Hermosa
April 24	Francis Scott Key	5	35	C. Vandervoort
April 24	Sherman	4A	32	A. McCarthy
April 25	James Lick	7, 8	50	Miss MacKinnon Miss Vendel
April 29	Sherman	3B	35	E. A. Shipaugh
May 3	Fairmont	3, 4, 5	25	T. Tucker
May 3	Fairmont	5A	12	H. Stark
May 3	Kate Kennedy	6B	15	M. C. O'Connell
May 6	State Teachers College	Collegiate	19	G. M. Findley
May 6	Dudley Stone	3	36	L. M. Gambetz
May 6	John Muir	7, 8	18	Miss Wiggins
May 6	Cleveland	1	25	A. Curley
May 6	Emerson	5B	40	L. Miller
May 6	Excelsior	4A	42	A. Walsh
May 7	Junipero Serra	6B	30	A. B. Pidgeon
May 7	Miss Ransom's	7, 8	25	M. Thompson
May 7	Junipero Serra	6	40	F. Foley
May 7	Grattan	7A	14	M. R. Ellis
May 9	Portola	4A	32	G. Robb
May 9	Excelsior	3B	34	V. C. Mehl
May 9	Sherman	2A	28	C. M. Gates
May 9	Sherman	2B	32	E. H. Lyon
May 9	Hillcrest	3B, 4A	23	R. Jacquemet
May 9	Hillcrest	2, 3B	23	S. Peterson
May 9	Excelsior	4B	34	M. O'Shaughnessy
May 9	Bernal Grammar	5B, 6A	34	M. Gustafson
May 9	Portola	3B, 4A	30	A. Simonetta
May 10	Spanish School	A11	23	Helpers Holy Souls
May 12	Cleveland	4A, 5A	69	C. Keck E. Rosenthal
May 14	Argonne	5A	30	J. Hayes
May 14	Henry Durant	1A	26	J. R. Ambrose
May 14	Fairmont	1B	30	M. E. Traynor
May 14	Noe Valley	5B	38	F. Barton
May 15	Garfield	3B	24	M. Muirs
May 15	Roosevelt	5B, 6A	45	H. Hogrefe
May 15	Roosevelt	4A, 4B	35	F. Flinn
May 15	Commodore Stockton	5A, 5B	85	Mr. Morton Misses Belmer
May 15	Garfield	3B	26	R. Zethin
May 15	Jean Parker	2A, 1, 2B	100	E. Gumasso
May 15	Daniel Webster	3B	30	E. Kirwan

Date 1924	School	Grade	No. of Pupils	Teacher
May 15	Noe Valley	5A	41	A. T. Crowley
May 15	Michelangelo	Open Air	24	V. Dassonville
May 15	Roosevelt	A, B	28	C. Henry
May 15	Girls High	Biology	8	Muriel Pettit
May 20	California School Arts-Crafts	H. S. Grads	22	P. W. Hall
May 21	Kate Kennedy	6	29	K. Spain
May 21	St. Boniface's	Grammar	140	
May 21	Haight	6B	30	S. M. Wieland
May 21	Commodore Stockton	3A, 3B	37	M. Fitch
May 21	Daniel Webster	2B	24	M. York
May 23	Jean Parker	3, 4A, 4B	115	Misses Toye, Kains, Connelly
May 23	Portola	2B	22	J. Sheehan
May 23	Portola	2A	21	E. Ventuleth
May 23	Lazear Jr. High	9A, 9B	27	M. Partridge
May 24	Portola	4B	34	N. E. Roth
May 24	Farragut	3B	28	G. O'Connor
May 24	Marin Avenue	6	22	M. Dart
May 24	Fairmont	5B	11	Mrs. Hanlon
May 26	Girls' High	1A, 1B, Biology	19	Muriel Pettit
May 26	Hearst	3A	31	V. Gillen
May 26	Sea Cliff Kindergarten	Kindergarten	12	Miss Gardea
May 27	Moulder	5	30	M. A. Heavey
May 27	Andrew Jackson	6A	30	Helen Hefron
May 27	Kindergarten		14	Miss L. A. Wafer
May 29	Jean Parker	5B	41	B. L. Pfarrer
June 4	Everett	7A, 8A	31	Mrs. E. M. Allen
June 4	Garfield	5A	40	M. E. Watts
June 4	Garfield	4A	33	A. Doherty
June 4	Garfield	4B	33	Miss McKeon
June 5	Bay View	6B	30	A. Murphy
June 5	Rincon	1	36	A. Enewold, H. Gaines
June 5	Prescott	7	65	Fred A. Beck
June 5	Gough	1, 2	14	H. A. Ridgway, A. Alcorn
June 6	Visitacion Valley	1A, 1B	43	Misses Kelly, Mack
June 7	S. F. Neighborhood Association		23	Miss Lavers
June 10	Rincon	2, 3	47	A. P. Barry
June 11	Paul Revere	3B	35	K. Roclofs
June 11	Dudley Stone	2B	35	N. R. Gambitz
June 11	Marshall	5B	33	C. Noonan
June 13	Emerson	2B	37	C. M. Strouse
June 16	Marshall	5	80	M. A. Miller
June 17	Hawthorne	6B	27	A. Fields
June 19	Lawrence	8	13	M. B. Edwards
Aug. 27	State Teachers College	Collegiate	42	G. M. Findley
Aug. 28	Twin Peaks	2, 3A, 2B	31	Miss Hient, Mrs. Staugel
Sept. 17	John Swett	1	100	Mrs. Alderson, Misses Murray, O'Keefe
Sept. 17	Crocker Jr. High	8A	30	C. A. Davis
Sept. 18	Excelsior	4B	38	E. M. Robinson
Sept. 27	Adams	2A, 2B	27	M. Hurley
Sept. 19	McKinley	6B	26	E. Harcourt
Sept. 19	Adams	3B	23	C. Hanson
Sept. 24	James Lick	6A	40	M. MacKinnon
Sept. 24	Sarah B. Cooper	5	37	S. Borepofsky
Sept. 26	Emerson	5A	27	A. Pierson

May 29, 1925

Date 1924	School	Grade	No. of Pupils	Teacher
Sept. 26	Sarah B. Cooper	Ungraded	15	W. P. Karnes
Sept. 27	Belvedere	7, 8	10	M. Davenport
Sept. 30	Spring Valley	3B	48	M. Haller
Sept. 30	Spring Valley	3A	48	M. Fitch
Sept. 30	Emerson	5A	20	A. Pierson
Sept. 30	Dudley Stone	Kindergarten	26	L. McMurde
Oct. 2	Emerson	4A	19	M. L. Trowbridge
Oct. 2	Immaculate Conception	Biology Class III.	31	Sister Alacoque
Oct. 3	Jean Parker	5B	30	D. Parker
Oct. 3	Denman	5A	33	E. Kengla
Oct. 4	Roosevelt Jr. High	9	26	S. M. Manby
Oct. 4	Ashland	4, 5	30	Miss Henshelwood
Oct. 8	State Teacher's College	Mixed	42	G. M. Findley
Oct. 8	Emerson	4	25	M. L. Trowbridge
Oct. 9	Franklin	6B	15	F. R. Curry
Oct. 10	Henry Durant	3A	25	I. O'Brien
Oct. 10	Sherman	6B	33	Furnia Davis
Oct. 10	Crocker Jr. High	7A	40	Mr. Owen
Oct. 13	St. Augustine	8	15	Sisters of Holy Names
Oct. 13	Girls High School	Campfire Group	9	Miss Pettit
Oct. 13	St. Rose Academy	Mixed	12	
Oct. 14	Emerson	4A	15	Miss Currid
Oct. 15	Sarah B. Cooper	4	39	G. Butler
Oct. 16	Patrick Henry	2	58	D. B. Carter
Oct. 23	St. Peter's	6	75	Brother Philip
Oct. 23	Argonne	Ungraded	12	May Wilson
Oct. 24	Chinese Baptist Mission	Primary	19	Effie Hoover
Oct. 27	Lowell High	10, 11	6	T. W. Jennings
Nov. 5	St. Anthony's		70	Sr. M. Bertranda
Nov. 10	St. Ignatius	College	25	George Haley
Nov. 12	Washington Irving	6A	20	A. Mansen
Nov. 13	Sheridan	8A	27	M. C. Stark
Nov. 14	Ashbury Heights Academy	High School	14	Eva Bradshaw
Nov. 18	Lowell	L2	5	L. M. Elskamp
Nov. 20	Farragut	4A	40	M. McLester
Nov. 26	Farragut	4, 5A, B	69	K. Auslen, E. McCowell
Dec. 10	State Teachers College	Nature Study	30	Mrs. I. Kane
Dec. 10	St. Ignatius	College	8	George Haley
Dec. 19	Homewood Terrace		16	M. E. White

Outside of San Francisco City and County

Jan. 1	Prescott, Oakland, 15th St. Annex.	4	20	M. Fortin, M. C. Gamble
Jan. 22	Columbus, Berkeley	7, 1, 4	28	F. Shapero
Jan. 31	Homestead, San Mateo	8	8	M. Brown
Jan. 31	Lawrence, San Mateo	8	12	M. B. Edwards
Feb. 21	Piedmont Avenue, Oakland	8H	25	Edna White
Feb. 22	Troup 3, Napa		14	
Mar. 1	Livermore High	Sophmore, Junior.	13	C. M. Harvey
Mar. 12	Lincoln, Berkeley	5H	34	M. Moffett
Mar. 14	Piedmont Avenue, Oakland	8	34	K. Comstock
Mar. 15	Prescott Jr., Oakland	9A, B	12	N. J. Callaghan
Mar. 20	Prescott Jr., Oakland	8B	16	L. J. Drumgold
Mar. 20	Prescott Jr., Oakland	8, 9	30	Van A. Nehen
Mar. 20	Prescott Jr., Oakland	8B	16	F. M. Muller
Mar. 21	Prescott Jr., Oakland	Girls Federal	11	F. F. Moser
Mar. 22	American Canyon, Napa	4 to 8	16	M. Wallace
Mar. 24	Dewey, Oakland	Mixed	9	T. E. Hennessey

Date 1924	School	Grade	No. of Pupils	Teacher
Mar. 26	High, Oakland	Biology	22	A. C. Peterson
Mar. 27	Prescott Jr. High, Oakland	8A	29	Mrs. Grace Burrell
Mar. 28	Lincoln, Berkeley	6A	30	H. Burrough
Mar. 29	Petaluma High		35	Miss Brown
Mar. 29	University of California	Zoology 113	19	J. Grinnell
April 9	Emerson, Oakland	4B	32	E. Craig, N. Sullivan
April 14	Grant, Richmond	5A, B	27	L. Pennington
April 14	Camp Fire Girls, Crockett		21	Mrs. Searle
April 22	Emerson, Oakland	4A	29	V. Yater
April 25	Columbus, Berkeley	4B		M. Suerdermann
April 26	Camp Fire Girls, Crockett			G. I. Thoyer
April 30	Cornell, Albany	8	85	D. Azbill
April 30	Santa Fe, Oakland	6B	15	Helen W. Dodge
May 6	Prescott, Oakland	5A	37	W. Fortier
May 8	Columbus, Berkeley	6	40	E. Cloudman
May 13	Franklin, Berkeley	6	31	Mrs. E. Seabury
May 16	Emerson, Oakland	5A	31	A. S. Hoag
May 17	Evangelical Lutheran Sunday School, Alameda		20	C. T. Bauer
May 17	Grant School, Richmond	3A, B	18	Muriel Burdon
May 17	Willard, Berkeley	8A	16	E. DeLancie
May 18	Lagunitas	All grades	32	M. Charlt
May 22	Prescott, Oakland	6A, B	21	Lydia Hey
May 22	Prescott, Oakland	5A, B, 6A, B	60	Misses Hey and Gould
May 24	Richmond Jr. High	8A	12	H. W. Varnum
May 24	Mastick, Alameda	5B	21	Damkroeger
May 26	Columbus, Berkeley	1B	21	E. Engebritsen
June 3	F. C. Havens, Piedmont	6A	36	B. T. White
June 5	Prescott, Oakland	6B, 7A	63	F. Beck, F. Miller, E. Gamble
June 5	Emerson, Oakland	5A	18	E. J. Smith
June 5	Emerson, Oakland	5B	31	B. Bruce
June 7	Mastick, Alameda	5B	9	L. Damkroeger
June 7	Mastick, Alameda	4B	14	A. Rutland
June 10	Edgemont, San Bruno	8	35	T. Confoglia
June 11	San Jose High	High School	116	L. Bland
June 11	San Jose High	High School	116	L. Judkins
June 14	North Brae Com. Sunday School, Berkeley		5	Miss Keester
June 16	Millbrae, Millbrae	1-8	40	F. Schroter
Sept. 3	Epworth League, Lodi		14	
Sept. 13	1st U. P. Church, Oakland		11	L. M. Miller
Sept. 13	Notre Dame, Alameda		54	
Sept. 17	Lincoln, Berkeley	5H	30	M. Moffett
Sept. 20	University High, Berkeley	Biology 1	5	
Sept. 26	Alameda S. S.	3-5	20	T. Mizunt
Sept. 30	Hillside, Berkeley	3, 4	35	G. Watts
Oct. 6	Cole, Oakland	6A	32	G. Gardiser
Oct. 15	Piedmont Avenue, Oakland	7B	43	C. Kener
Nov. 1	Alexander Hamilton, Oakland	8B	5	L. De la Mater
Nov. 10	North Brae, San Bruno	4, 5	25	B. O'Donnell
Nov. 10	North Brae, San Bruno	6, 7	18	J. Bassett
Nov. 10	University Farm, Davis	Zoology	16	T. I. Storer
Nov. 15	Mastick, Alameda	5B	25	C. Damkroeger
Nov. 15	Mastick, Alameda	5B	16	H. F. Holt
Nov. 22	Franklin, Berkeley	Ungraded	14	C. F. Barker
Nov. 25	Jefferson, Berkeley	Opportunity	15	G. Kling
Nov. 28	San Mateo Union High	10	18	M. Dutrich
Nov. 29	Durant, Oakland	8B	20	M. S. Calder

Schools of San Francisco:		
Total Number Visiting Pupils	6382	6382
Total Number Visiting Teachers	207	
Total Number Visiting Classes	238	
Schools Outside of San Francisco:		
Total Number of Pupils	1901	1901
Total Number of Teachers	72	
Total Number of Classes	84	
		8283

Museum Activities and Growth

The activities of the respective departments are fully set forth in the reports of the curators. Only a few of the more important activities need be mentioned here.

The herbarium of the Department of Botany, under the able management of Miss Eastwood, the curator, has continued to grow rapidly in number and value of specimens. The most notable accession was a collection of 290 tropical trees, shrubs, etc., collected by Miss Eastwood in the Hawaiian Islands in August, 1924. The Department of Entomology has made remarkable advances within the year. The Van Dyke collection of coleoptera, the Holbrook lepidoptera, and the Koebele general collection, add greatly to the value of the collections of that department. The Holbrook bequest of $2000 is of special interest and value to the department.

The Department of Exhibits has made commendable progress by installing four new panel habitat groups and in collecting materials for other panel groups now in course of preparation. These little panel groups are adding greatly to the value and interest of the public exhibits. One exhibit that has long been in preparation but which is yet far from completion is that of the birds of Golden Gate Park. Another merely begun is that of the fur-bearing animals of California. It will be difficult to complete these exhibits without financial help from the outside. Because of the very great educational value to the schools of San Francisco which these exhibits will have, it ought to be possible to find one or more friends of the Academy who will supply the funds needed for their completion. A gift

of a few hundred dollars, to employ competent collectors and taxidermists, would soon enable us to complete these exhibits.

The Department of Herpetology suffered an irreparable loss in the untimely and sad death, October 24, of Dr. John Van Denburgh, for many years the efficient curator of that department. The assistant curator, Mr. Slevin, spent some months in Guatemala in the interest of the department, which resulted in the addition of 2419 specimens to the collections.

The Library had a good growth during the year, the acquisitions totaling 6637 books and pamphlets; 4183 being a gift from Mr. Douglas Van Denburgh on behalf of his brother, Dr. John Van Denburgh. The Director of the Museum donated 690 miscellaneous books and pamphlets.

The Department of Ornithology and Mammalogy has had a very satisfactory year. Considerable field work was carried on by the curator and assistants, chiefly in Riverside and Modoc counties, which resulted in many desirable specimens of birds and mammals and gratifying increase in our knowledge of geographic distribution.

The Steinhart Aquarium has continued to grow in public interest and educational value, as fully set forth in the superintendent's report.

The growth of the Museum during the eight years since the formal opening on September 22, 1916, has been very gratifying. When the limited size of the building is considered, and the always very inadequate income of the Academy, and the further important fact that practically everything in the Museum (library, research collections and exhibits) has been acquired since the great fire of 1906, the growth has been scarcely less than marvelous. This has been made possible through a number of fortunate conditions or factors. In the first place, the fire of 1906 left the Academy with nothing in the way of buildings, library, study collections, or exhibits; about all that was left was a small membership filled with courage, determination and faith in the future. The Academy, not being hampered by useless or antiquated material equipment, or traditions, was free to develop rationally and in accordance with modern ideas of what a modern museum should be. And, most important of all, there has been, during the development of the Museum, the most perfect and sympathetic

agreement and cooperation among the Board of Trustees, the Council, the Museum Staff, and the general membership of the Academy, as to matters of policy and the lines along which the Academy's activities should be directed and along which the Museum should develop. This unanimity of opinion and hearty cooperation have enabled us to accomplish results that would otherwise have been impossible with the limited income the Academy has.

The fact that the California Academy of Sciences is primarily an institution for scientific research has been kept constantly in mind. That it has a second function or duty educational in character, has also been recognized. There are those who would stress the scientific or research function of the Academy and minimize or eliminate altogether the popular educational activities of the Academy as functioning through museum exhibits and other channels leading out to the general public.

On the other hand, there are those who would limit or eliminate altogether the research activities of the Academy and make it purely a popular educational institution.

The management of the Academy has not accepted either of these extreme views; it regards the Academy as being both a research and an educational institution. Although primarily devoted to scientific research, the fact that we are located in Golden Gate Park on city land requires the Academy to do something for the city in return; this it is doing by maintaining a public museum and a public aquarium each open and free to the public every day in the year.

The Academy's scientific activities during the past 10 years have been the greatest in its history. The published results of studies based on the Academy's collections by the Academy's scientific staff and other specialists have in the past 10 years totaled more than 5495 pages of our Proceedings and Occasional Papers, and have greatly enriched the literature of the subjects with which they deal. The results of a number of important studies remain to be worked up or have not been published because of lack of funds. I may be permitted to call special attention to one particular piece of recent scientific work of the Academy, namely: the Academy's expedition to the Gulf of California in 1922. Although the expedition was in

the field only 87 days, the collections secured were unusually large and remarkably rich in new species. Study of all the groups represented in the collections have not yet been completed, but the following figures may be given:

Total number of species listed in the reports.

Botany:	
Vascular plants	456
Fungi and lichens	20
Marine algæ	145
Mollusks	26
Insects, etc.	970
Reptiles	89
	1706

Number of new species and subspecies described:

Botany:	
Vascular plants	55
Marine algæ	106
Animals:	
Mammals	1
Reptiles	20
Insects and insect allies	425
Mollusks	13
	620

As already stated, not all the results of this expedition have as yet been published; indeed, the study of the collections in some of the groups, particularly the mollusks, has not been completed. Many more new species may be expected in the papers yet to come.

Meeting of the Pacific Division of the American Association for the Advancement of Science and its Affiliated Societies.

The eighth annual meeting was held at Stanford University, June, 25-28, 1924, in the buildings of Stanford University.

The meeting was an unusually interesting and successful one. The Academy was well represented in the attendance and on the various programs.

Dr. David Starr Jordan, President of the Pacific Division, presided at the Research Conference at noon on the 25th and in the evening of the same day gave the Presidential address, his subject being "Science and Sciosophy".

President Ray Lyman Wilbur welcomed the delegates and members to Stanford University and Dr. C. E. Grunsky, President of the California Academy of Sciences, and Vice-President of the Pacific Division, gave the response.

Other members of the Academy who were in attendance and many of whom were on the program of one or more of the affiliated societies were the following:

L. R. Abrams, Frank Adams, Robert G. Aitken, Robert Van Vleck Anderson, E. P. Babcock, T. D. Beckwith, Edward Berwick, Frank E. Blaisdell, Sr., L. E. Blochman, Douglass H. Campbell, Roy. E. Campbell, T. D. A. Cockerell, R. W. Doane, W. F. Durand, Alice Eastwood, E. O. Essig, Barton Warren Evermann, Grace M. Findley, E. C. Franklin, S. B. Freeborn, Walter M. Giffard, Frank T. Green, R. L. Green, W. A. Grubb, C. E. Grunsky, Harold Heath, L. O. Howard, Oliver P. Jenkins, Herman Knoche, C. B. Lastreto, A. O. Leuschner, E. P. Lewis, Earl G. Linsley, F. M. MacFarland, Marsden Manson, E. G. Martin, Isabel McCracken, E. P. Meinecke, E. D. Merrill, Joseph H. Moore, James McMurphy, Mary E. McLellan, Susie M. Peers, George J. Peirce, Mrs. Kate E. Phelps, C. M. Richter, Wm. E. Ritter, G. P. Rixford, N. B. Scofield, Alvin Seale, J. R. Slonaker, J. O. Snyder, Miss Clara S. Stoltenberg, Tracy I. Storer, Will F. Thompson, S. D. Townley, E. P. Van Duzee, Edwin C. Van Dyke, A. G. Vestal, F. W. Weymouth, Ray Lyman Wilbur, Bailey Willis.

First Pan-Pacific Union Food Conservation Congress, at Honolulu, July 31 to August 14, 1925.

The California Academy of Sciences was represented at this Congress by a number of its members, among whom were the following: E. A. Beals, Dr. Mary Page Campbell, Dr. T. D. A. Cockerell, Miss Alice Eastwood, Edward M. Ehrhorn, Dr. Barton Warren Evermann, Walter M. Giffard, Dr. W. B. Herms, Dr. L. O. Howard, Dr. David Starr Jordan, Eric Knight Jordan, Prof. E. D. Merrill, Dr. Herbert Osborn, Dr. Wm. A. Setchell, Dr. Hugh M. Smith, F. X. Williams.

Dr. Campbell, Miss Eastwood and Dr. Evermann were regularly appointed delegates representing the California Academy of Sciences; Dr. Howard was the permanent chair-

man of the Congress; Dr. Jordan, Dr. Smith and Professor Merrill were honorary vice-presidents representing respectively the United States, the Kingdom of Siam, and the Philippine government; Dr. Evermann was chairman of the section on Fisheries, Marine Biology and Oceanography. Papers were presented, and discussions participated in, by Howard, Smith, Jordan, Beals, Evermann, Cockerell, Merrill, Setchell, and others.

One of the subjects that received much attention by the Congress was that of the conservation of the marine mammals and other fishery resources of the Pacific, and the urgent necessity for an international treaty for the protection, proper utilization and conservation of marine mammals was particularly stressed.

The following resolutions prepared, approved, and submitted by the Section on Fisheries, Marine Biology, and Oceanography, were approved and adopted by the Congress:

RESOLUTION XVIII.—*Whereas,* the pollution of many coastal waters, bays, estuaries, harbors, and rivers, resulting from the discharge into said waters, of oil, ashes, and other contaminating substances by oil tankers, oil-consuming motor boats and other craft, and of waste from shore plants of oil companies and industrial plants of various kinds, has become a serious menace to sea birds, surface-swimming fish eggs and larvæ and the plankton upon which useful species feed, and to the bottom and shore life of our bays and harbors, at the same time rendering our beaches filthy, unsanitary, and unsightly; therefore, be it

Resolved, That the First Pan-Pacific Food Conservation Conference expresses the wish and the hope that the properly constituted authorities of the Pacific enter into correspondence for the purpose of bringing about an international treaty or agreement under which such pollution may be prohibited.

RESOLUTION XIX.—*Resolved,* That this conference recommends to the National Research Councils of America, Australia, and Japan, through their governments, as well as to the governments of British Malaya, China, Indo-China, the Netherlands East Indies, New Zealand, and Siam, that there be initiated as early as possible coordinated investigations into the question of the occurrence and distribution of marine borers, as well as into means of combating such organisms.

RESOLUTION XX.—*Whereas,* the sea turtles and their eggs constitute a valuable food resource in many of the countries of the Pacific Ocean; and

Whereas, the supply of such turtles throughout the Pacific Ocean, as in other oceans, has decreased greatly in recent years, and in some regions is fast approaching the vanishing point; and

Whereas, the situation has been brought about by ignorance or neglect of the fundamental requirements of the turtles, whereby there has occurred destruction of adult and young turtles and turtle eggs without regard for the future,

Be it Resolved, by the Pan-Pacific Food Conservation Conference that prompt action is necessary to save the marine turtles of various countries from commercial, if not actual, extinction, and that all Pacific nations having resources in sea turtles should forthwith take adequate steps to preserve and increase the supply, including the rigid regulation or total prevention of turtle fishing for a term of years, and, where necessary, the absolute prohibition of the gathering of turtle eggs until such time as the increased abundance of turtles would justify the taking of limited numbers of eggs.

RESOLUTION XXI.—*Whereas,* it is known that many valuable species of marine mammals such as fur-seals, sea-otters, elephant seals and whales, and many species of important food fishes, such as salmon and halibut, formerly occurred in the Pacific in such vast numbers as to constitute the objects of fisheries whose annual products were worth more than one hundred million dollars, and

Whereas, nearly all of those great natural resources have been seriously depleted, many of them even to commercial extinction, through greed, short-sightedness and ill-considered fishery methods, and

Whereas, it is known that small remnants of fur-seal and sea-otter herds and small numbers of whales and of other commercially valuable species still remain in certain places, and

Whereas, the rapid recovery of the Alaska fur-seal herd in the short period of ten years from complete commercial ruin to an annual production of more than $1,500,000, as a result of the international fur-seal treaty of 1911, demonstrates conclusively the wonderful recuperative power of such depleted natural resources of the sea under international cooperation, and justifies the belief that other depleted fur-seal herds and fisheries can be rehabilitated through similar cooperation among the nations concerned, and

Whereas, it is conservatively estimated that these resources when rehabilitated will yield to the world a regular product of more than one half billion dollars value annually; therefore, be it

Resolved, That the First Pan-Pacific Food Conservation Conference strongly urges that the various maritime countries of the world, particularly those bordering on, or interested in, the Pacific, be invited to send delegates to a convention for the purpose of negotiating an international treaty for the restoration, proper utilization and conservation of the vanishing fur-seal and sea-otter herds and other natural fishery resources of the Pacific; and be it further

Resolved, That this conference recommends that the governments of the countries bordering on the Pacific enter into correspondence for the purpose of establishing an International Commission for the scientific study of the biology, physics and chemistry of the Pacific in the interest of the restoration, proper utilization and conservation of its vanishing natural resources.

RESOLUTION XXII.—Resolved, That it be a recommendation from the First Pan-Pacific Food Conservation Conference to the various maritime countries of the Pacific area that urgent attention be directed to the study of ocean and coastal currents, and to the working up of data already available, with a view to the elucidation of important problems in navigation and commercial fisheries concerning the countries mentioned.

RESOLUTION XXIII.—*Whereas,* the First Pan-Pacific Food Conservation Conference has considered plans for a coordinated study of the food relationships of marine organisms in the Pacific area; and

Whereas, these plans call for the cooperation of the sciences of physics, chemistry, geology, zoology, botany, physiology and bacteriology, (a) in investigating the role of marine organisms in food production, (b) in promoting the cooperation of biological laboratories and other institutions in furthering such studies, and (c) in arranging the referring of materials collected to taxonomists and other specialists as an aid to the knowledge of the fauna and flora of the Pacific,

Now, Therefore, Be it Resolved, That this conference expresses its approval of the plans and suggests that the Pan-Pacific Union might give the project its support and might offer its services for the coordination of individuals and institutions engaged in each field.

Use of the Academy Library and Collections by Investigators and Students.

Students and investigators continue to avail themselves of the advantages of our library and study collections. These include not only members of the Academy but others who come to us for help in many ways which the Academy can give them. It is the policy of the Academy to keep on hand specimens of birds, mammals, etc., illustrative particularly of the fauna and flora of the Bay region that may be helpful to teachers in their school work.

A troup of Boy Scouts under Scout Master Harold E. Hanson continues to meet weekly in the Academy's Auditorium.

Publications by the Museum Staff

The curators and others connected with the Museum and Aquarium staffs have continued active in contributing to the literature of their respective subjects. The list of their contributions published in 1924 follows:

Evermann, Barton Warren

1. The Steinhart Aquarium of the California Academy of Sciences. <Scientific Monthly, Vol. XVIII, No. 2, pp. 149-158, 5 plates, February, 1924.
2. Об охране естественных богатств Тихого океана. <Russian Review of Foreign Trade and Markets, No. 4, pp. 10-12, February 18, 1924.
3. The Steinhart Aquarium. <Sierra Educational News, Vol. XX, No. 3, pp. 163 and 181, March, 1924.
4. The Steinhart Aquarium. <American Hebrew, Vol. 114, No. 24, pp. 756, 757 and 762, April 25, 1924. (Reprint of article in Scientific Monthly of February, 1924.
5. The American Association for the Advancement of Science; Stanford University Meeting of the Pacific Division. <Science, Vol. LX, No. 1544, pp. 103-108, August 1, 1924.
6. The Food Conservation Conference at Honolulu of Special Interest to San Francisco. <San Francisco Business, Vol. 9, No. 10, pp. 10, 11 and 19, September 5, 1924.
7. The Pan-Pacific Food Conservation Conference. <Science, Vol. LX, No. 1551, pp. 253-254, September 19, 1924.
8. Report of the Director of the Museum (of the California Academy of Sciences) for the year 1923. <Proc. Calif. Acad. Sci., 4th Ser., Vol. XII, No. 33, pp. 1232-1285, plates 89-92, October 10, 1924.
9. The Steinhart Aquarium of the California Academy of Sciences. <Indiana University Alumni Quarterly, Vol. XI, No. 4, pp. 501-506, October, 1924.
10. The Conservation of the Fishery Resources of the Pacific. <Mid-Pacific Magazine, Vol. XXVIII, No. 6, pp. 539-546, 6 halftones, December, 1924; actually published in October.
11. Report on the Fishes collected by the Barbados-Antigua Expedition from the University of Iowa in 1918. Joint author with Alvin Seale. <University of Iowa Studies in Natural History, Vol. X, No. 4, pp. 25-41, one plate, December 6, 1924.

Eastwood, Alice

1. Trees of the Mount Tamalpais Region. <Out-of-Doors, September, 1924.
2. Annual Report, Department of Botany for 1923. <Proc. Calif. Acad. Sci., 4th Ser., Vol. XII, No. 33, pp. 1258-1260, October 10, 1924.

Mailliard, Joseph

1. Autobiography of Joseph Mailliard. <Condor, Vol. XXVI, No. 1, pp. 10-29, January 21, 1924.
2. Woodpeckers, Pecan Nuts, and Squirrels. <Condor, Vol XXVI, No. 1, pp. 30-31, January 21, 1924.
3. Sparrow Hawk Attacking Robins. <Condor, Vol. XXVI, No. 1, pp. 34-35, January 21, 1924.
4. Census of Birds' Nests in the Music Concourse, Golden Gate Park, San Francisco, California. <Gull, Vol. VI, No. 1, January, 1924.
5. A Wintering Ground of the Yolla Bolly Fox Sparrow. <Condor, Vol. XXVI, No. 3, pp. 112-114, May 15, 1924.
6. A New Mouse *(Peromyscus slevini)* from the Gulf of California. <Proc. Calif. Acad. Sci., 4th Ser., Vol. XII, No. 31, pp. 1219-1222, July 22, 1924.
7. Annual Report of the Department of Exhibits for 1923. <Proc. Calif. Acad. Sci., 4th Ser., Vol. XII, Nos. 32-33, pp. 1262-1263, October 10, 1924.
8. Annual Report of the Department of Mammalogy for 1923. <Proc. Calf. Acad. Sci., 4th Ser., Vol. XII, Nos. 32-33, pp. 1265-1266, October 10, 1924.
9. Annual Report of the Department of Ornithology for 1923. <Proc. Calif. Acad. Sci., 4th Ser., Vol. XII, Nos. 32-33, p. 1266, October 10, 1924.
10. Some New Records for Northeastern California. <Condor, Vol. XXVI, No. 6, pp. 213-217, November 15, 1924.

Seale, Alvin (with Evermann, Barton Warren)

Report on the Fishes collected by the Barbados-Antigua Expedition from the University of Iowa in 1918. <University of Iowa Studies in Natural History, Vol. X, No. 4, 1924, pp. 25-40, 1 pl.

Van Denburgh, John

1. Notes on the Herpetology of New Mexico, with a list of species known from that state. <Proc. Calif. Acad. Sci., 4th Ser., Vol. XIII, No. 12, pp. 189-230, March 18, 1924.
2. Contributions to Oriental Herpetology, I. Sahkalin. <Proc. Calif. Acad. Sci., 4th Ser., Vol. XIII, No. 15, pp. 243-246, November 6, 1924.
3. On *Laticauda schistorhynchus* and *Laticauda semifasciata.* <Proc. Calif. Acad. Sci., 4th Ser., Vol. XIII, No. 16, pp. 247-248, November 6, 1924.

Van Duzee, Edward P.

1. A New Ceratocombid from Mexico. <Proc. Pacific Coast Entomological Society, Vol. II, pp. 33-34, January 31, 1924.
2. The Genus Erythroneura in California. <Proc. Calif. Acad. Sci., 4th Ser., Vol. XIII, No. 13, pp. 231-236, March 18, 1924.
3. Characters of two North American Chermidæ. <Pan-Pacific Entomologist, Vol. I, No. 1, pp. 22-23, July, 1924. (Actual date of publication, June 28, 1924.)

4. Annual Report, Department of Entomology for 1923. <Proc. Calif. Acad. Sci., 4th Ser., Vol. XII, No. 33, pp. 1260-1261, October 10, 1924.
5. Annual Report, Assistant Librarian for 1923. <Proc. Calif. Acad. Sci., 4th Ser., Vol. VII, No. 33, p. 1265, October 10, 1924.

Conservation of Wild Life

The Academy's Committee on Wild Life continued active during the year. Special attention was given to the antelope and elk found in the state. Arrangements have been made whereby the Academy has secured the cooperation of some 20 special observers who make it their duty and pleasure to make observations and investigations from time to time regarding the wild life in their respective localities, and to make formal annual reports to the Academy. In addition, they make special reports from time to time as their observations may require. Following is a

List of Special Wild Life Observers in 1924

1. Albright, Horace M.....Superintendent Yellowstone National Park.
2. Anthony, Alfred W.....237 Spruce Street, San Diego, California.
3. Courtright, George W.....Malin, Klamath County, Oregon.
4. Cuthbert, Edmund R.....David, Chiriqui, Panama.
5. Durbin, William G.....Susanville, Lassen County, California.
5. Eakin, J. Ross.....Superintendent Grand Canyon, National Park, Grand Canyon, Arizona.
7. Hedderly, Edwin A.....Pacific Finance Building, Los Angeles, California.
8. Hutchings, H. W.....Acting Superintendent Glacier National Park, Belton, Montana.
9. Jaeger, Edmund C. .....Director Riverside Junior College, Riverside, California.
10. Karstens, Henry P.....Superintendent Mount McKinley National Park, McKinley Park, Alaska.
11. Lee, William J.....Susanville, Lassen County, California.
12. Lewis, Washington B.....Superintendent Yosemite National Park, Yosemite, California.
13. Miller, John O.....Tennant, Siskiyou County, California.
14. Ober, Edwin H.....Big Pine, Inyo County, California.
15. Russell, Carl P.....Park Naturalist, Yosemite, California.
16. Sanson, N. B.....Banff Museum, Banff, Alberta, Canada.
17. Shay, Arthur T.....Upland, San Bernardino County, California.
18. Thomson, Charles Goff...Superintendent Crater Lake, National Park, Medford, Oregon.

19 Tomlinson, Owen A.....Superintendent Rainier National Park, Ashford, Washington.
20. White, John R.....Superintendent Sequoia National Park, Sequoia, Tulare County, California.

The census of California wild animals for 1924 was about the same as for 1923, as follows:

Mountain Sheep.....about 200
Antelope .....about 1000
Valley Elk .....about 500;

the locations being those of our last report,

California Grizzly Bear: In November, 1924, a report was received from Col. John R. White, Superintendent of the Sequoia National Park, that a large bear had been observed a number of times in and near the Giant Forest and identified as a Grizzly Bear.

This news created considerable interest, as it had generally been supposed that this species had been extinct in California since the death in 1911 of the Golden Gate Park grizzly known as "Monarch." The identification needs verification.

It can now be definitely stated that several grizzlies have been bagged and identified since 1911. They are as follows:

October, 1916, female, from Tujunga Canyon, Los Angeles County; hunter, Cornelius B. Johnson.

August, 1922, female, from Horse Corral Meadows, Tulare County; hunter, J. B. Agnew.

There are a number of earlier dates which might prove interesting, as "Monarch" was captured about 1886. These reports are:

1895, last grizzly bagged in Yosemite National Park.

1897, male; from Tujunga Canyon, San Gabriel Mountains, Los Angeles County.

1908, two specimens from Trabuco Canyon, Santa Ana Mountains, Orange County.

Grizzly bears (but, of course, not of the California species) still occur in several of the western States, notably Arizona, Colorado, Idaho, and Montana. The latest report from the Yellowstone National Park of January, 1925, states there are some sixty (60) grizzlies at present living in the Park.

The Academy's observers' reports to December 31, 1924, from the National Parks of large game are as follows:

Mr. J. Ross Eakin, Superintendent Grand Canyon, Arizona:

Mountain Sheep	100
Antelope	35
Deer	2,650

This does not include the well known Kaibab herd which numbers 5000 or more.

The eleven (11) antelope from Nevada placed on the Tonto Plateau in the Grand Canyon are reported as doing well.

Mr. Henry P. Karstens, Superintendent Mount McKinley Park, Alaska:

Caribou	minimum 5,000
Caribou	maximum 20,000
Caribou	actual count 17,255
Mountain Sheep	minimum 300
Mountain Sheep	maximum 2,000
Moose	very numerous
Bear	very numerous

Mr. Chas. G. Thomson, Superintendent Crater Lake National Park, Oregon:

Bear	15
Deer	50
Elk (planted)	9

Mr. Owen A. Tomlinson, Superintendent Rainier National Park, Wash.:

Deer, blacktail	350
Bear, black	200
Goat, white mountain	250
Elk	14

Mr. Horace M. Albright, Superintendent Yellowstone National Park, Wyoming:

Elk	20,000
Buffalo	774
Antelope	395
Mountain Sheep	600
Deer, mule	1,800
Deer, Virginia white-tail	40
Moose	450
Bear, black	200
Bear, grizzly	60

The Academy received $300 from the Permanent Wild Life Protection Fund, through Dr. Wm. T. Hornaday, Trustee, for use in connection with the Academy's conservation work.

Committee for Conservation Wild Animal Life:

S. Leonard Abbott
Barton Warren Evermann
Washington B. Lewis
John R. White
M. Hall McAllister, Chairman

Needs of the Museum

It can be said that the research collections, the library and the museum exhibits have been growing as rapidly and as satisfactorily as the income of the Academy and museum space permit; in fact, they have already grown far beyond the housing capacity of the building. There is not a single department that is not terribly congested. A few illustrations may be given: In the Department of Botany all the space is so occupied as to interfere seriously with the department's work, and the curator has been compelled to place 57 large herbarium cases out in the hall, where they should not be if there were any other place for them. The Department of Herpetology is much congested and it has become necessary to store many boxes of specimens in the basement where they cannot be reached except with great difficulty. Entomology and Paleontology are even worse. The growth of these departments has been very great. Not only are their rooms chock-a-block, but the curators have been compelled to store important collections and valuable materials not only out in the halls, where they are in the way and unsightly, but even in the basement, where they are rendered temporarily valueless because of their inaccessibleness.

The Department of Ornithology and Mammalogy has greatly outgrown the two large rooms originally assigned to it, and has filled to congestion the room intended for Invertebrate Zoology.

The Library is in an even worse condition as to space; it is overcrowded everywhere. There is very urgent need for fully twice the space the Library now occupies.

May 29, 1925

The housing and proper care of the Academy's own publications has become a very serious problem. After sending to all our members and domestic and foreign exchanges, additional storage space is required each year for the Academy's reserve supply of each volume of Proceedings and Occasional Papers. There is no one room available and adequate for this purpose, and we have been compelled to use a number of different and more or less isolated or detached places, such as the lower room of the library, the room opposite the office, the store room on first floor, the lower hall, and even the check room,—a makeshift arrangement quite unsatisfactory in every way.

The only practical solution of this situation is *more space,* either in the form of a new building or through changes in, or additions to, the present building.

The best solution would, of course, be the construction of an East Wing, as contemplated in the original plans of Architect Hobart.

An East Wing would relieve the congestion in the present West Wing, provide space for museum exhibits in departments not now represented in the present exhibition halls, and, of equal or even greater importance, provide a modern up-to-date Auditorium, adequate for our public lectures and all other public functions of the Academy. The possibility of securing funds for this purpose should be carefully considered by our Trustees.

Another possibility worth serious consideration is the closing in of the Whale Court. This would be a comparatively easy matter. A glass roof of substantial construction, a floor, and a wall at the present open end are all the important structural requirements. The required interior construction and furnishings could be provided at slight expense. The entire structure would cost only a few thousand dollars, and would prove of inestimable value to the research and educational work of the Academy.

This suggestion is recommended to the Council and the Board of Trustees for their careful consideration.

With the growth of the Museum in its research collections, exhibits, library, educational activities, and material equipment, the work of the curatorial, clerical and administrative employes has increased correspondingly.

One result of its increased scientific and educational activities is that the Academy has become better known throughout the world, and especially on the Pacific Coast, as a scientific center to which an ever-increasing number of people apply for information on subjects in which they are interested. Hundreds of letters are received every year asking for information on a wide range of subjects, and many specimens are submitted for identification. It is the practice of the Director to give the information desired when possible, and, even when not possible, to send a courteous reply, all of which takes much time of the Director, the clerical force, and the curators.

As the collections increase, the curators are compelled to devote more and more of their time to their care, to purely curatorical work. Our curators, capable of doing high-class scientific work, and who should have practically all their time for research work, are compelled to devote most of their time and thought to the care of the collections, work which should and could be done by assistant curators and laboratory assistants if we had them. Fortunately, we now have such assistants in some of the departments; we should have them in all.

Another matter to which attention should be called is that of salaries. The best salaries the Academy pays its Museum and Aquarium employes are less than unskilled labor receives in some cases, and greatly less than skilled laborers get; less than grade teachers receive, and much less than high school teachers and principals receive; less than is paid assistant professors in the colleges. And it must not be forgotten that the teachers and professors are on duty fewer hours each day, only five days in the week, and only nine or ten months in the year, while the Academy employes are on duty more hours each day, five and one-half days each week, and twelve months a year, with only two weeks' annual leave! Nor do our employes receive as good salaries as are paid in other museums.

This is not just to our employes nor creditable to the Academy. Now that the Academy's income has somewhat increased, the salaries of the Museum employes can and should be increased. And, as the salaries of the Aquarium employes are less than the city pays for similar work in other places, they should be made at least equal to the latter.

STEINHART AQUARIUM

The Steinhart Aquarium was made possible through the public-spiritedness and generosity of the late Ignatz Steinhart, who died May 15, 1917. Mr. Steinhart gave to the California Academy of Sciences $250,000 for the construction of the building and for its equipment.

This amount was paid to the California Academy of Sciences by the executors of the Steinhart Estate (Mr. Jesse Lilienthal, Jr., and Mr. John I. Walter) December 17, 1919. As building conditions then were not good, the Trustees of the Academy voted to defer building for a time and to loan the money. This they did on the very day the money was received, and on such good terms that, up to the first of this month (February, 1925), $55,533.67 interest has been received, all of which, together with the original $250,000, has been put into the building and its equipment.

The Aquarium was completed and formally opened to the public September 29, 1923. It has now been open and in operation 17 months.

The Steinhart Aquarium is operated by the California Academy of Sciences. It is maintained by the City and County of San Francisco from funds which Charter Amendment No. 34 requires the Board of Supervisors to appropriate and pay to the California Academy of Sciences for that purpose.

For the maintenance of the Aquarium during the first fiscal year, July 1, 1923, to June 30, 1924, both inclusive, the Academy requested $40,260; the Supervisors appropriated $40,000, of which the Academy spent $39,600.70. We were able to keep within the allotment only by omitting a number of things that should have been done and by keeping the cost of operation down to the minimum. For the current fiscal year we asked for $44,000. The Supervisors have thus far allowed us only $40,000 for the year. During the first half of this year we have spent $19,778.48. The expenses during the last half of the fiscal year will be greater; for the last half of last year they were $25,182.56. This indicates that we should have not less than $50,000 annually for the efficient operation of the Aquarium.

The total number of visitors in the calendar year 1924 was 1,180,352; the total number to January 1, 1925, was 1,662,014; to February 15, 1925, 1,759,742. This is an average daily attendance of 4261.

The cost of maintenance from July 1, 1923, to December 31, 1924, both dates included, was 3½ cents per visitor.

Aquarium Personnel

The personnel of the Aquarium January 1, 1925, was as follows:

Dr. Barton Warren Evermann, Director, part time; W. W. Sargeant,* Secretary, part time; Susie M. Peers, Secretary to the Director, part time; Mrs. Constance W. Campbell, office assistant, part time; Alvin Seale, Superintendent; Wallace Adams, Assistant Superintendent; H. Walton Clark, aquarist and chief collector; William J. Martin, assistant collector; Clynt S. Martin, chief engineer; John R. Moorefield, assistant engineer; W. F. Dent, assistant engineer; Warren R. Hayes, relief engineer; Charles Brandt, chief attendant; W. S. Walker, assistant attendant; Clyde E. Guidry, assistant attendant; Peter J. Burke, janitor; Patrick O'Neill, assistant janitor; S. J. Shenefield, carpenter and general utility man; Lucie Hicks, door attendant.

Department Reports

Department of Botany

The herbarium has been increased during the past year by the addition of about 7000 specimens and 1663 species. These have come by gift, exchange, purchase and exploration, and are as follows:

Missouri Botanical Garden, 200, chiefly from the eastern United States.

Gray Herbarium of Harvard University, 1980, from the United States, Mexico, South America and Europe. Of these 1559 were unmounted and 421 mounted.

Arnold Arboretum of Harvard University, 141, chiefly woody plants.

Canton Christian College, Canton, China, 477 of the Hainan Island collection, by purchase. This collection added many species to the collection as well as many paratypes.

Dr. E. Werdermann, Santiago, Chile, 300 Chilian plants by purchase. This set of plants is most beautifully prepared and almost every specimen added a new species to our collection and several paratypes.

Mrs. Joseph Clemens, who is now in the Philippines, donated 64 specimens from the Philippines, and we purchased 742 from Texas and Oklahoma.

*Absent on leave without pay.

Eric Walther, besides contributing 152 exotics cultivated in California, almost all new to the herbarium, has been assiduous in furnishing specimens from Golden Gate Park for the flower show in the museum.

Dr. Barton W. Evermann always collects botanical specimens when on a scientific trip and added 78 specimens with duplicates collected by him in April, 1924, in the vicinity of Cottonwood Spring, Riverside County, and 8 from Año Nuevo Island, off the coast of Santa Cruz County.

The curator collected 290 tropical trees, shrubs and weeds in Honolulu when on a trip there as a delegate to the Pan-Pacific Food Conservation Congress, also about 100 from California localities.

The following botanical centers have received duplicates of the collection made by Ivan M. Johnston on the 1921 California Academy expedition to the Gulf of California:

848 United States National Herbarium, Washington, D. C.
458 New York Botanical Garden, Bronx Park, N. Y.
584 Royal Herbarium, Kew, Surrey, England, also 70 from California.
466 University of California, Berkeley.
144 woody plants to the Arnold Arboretum, Jamaica Plan, Mass., also 137 from California.

Besides the care of a rapidly growing herbarium, the curator has devoted much time to answering inquiries which are constantly increasing, to giving popular talks on plants and the need for conservation to schools and clubs, to conducting weekly meetings or excursions of the California Botanical Club, to the bimonthly Thursday evening meetings of the ambitious gardeners of Golden Gate Park and to the flowers show in the vestibule of the museum. During the year thousands of species both native and exotic are on exhibition, each labelled with scientific and common name. Californian species have the locality designated, the exotic, their native home. Without the faithful and enthusiastic care given by Mrs. Joanna Wilkens, who keeps all clean and orderly, it would not be possible to maintain this greatly appreciated exhibit.

My regular assistant, Mrs. George H. Phelps, has been most efficient in mounting and installing the accessions and in remounting the Prager Herbarium where necessary. Much time is also given to attending to drying specimens and to miscellaneous duties.

Mrs. E. C. Sutliffe has added to the collection of Hepatics which she so beautifully has prepared for our herbarium and has been most helpful in furnishing wild flowers for the flower exhibit in the museum.

Miss Clara Tose has been employed on Saturdays and holidays since September to stamp and number the specimens in the herbarium and up to date there are about 80,000 stamped. From present indications the collection should number about 200,000 specimens.

Alice Eastwood, *Curator.*

Department of Entomology

The year 1924 has been one of unusual development in the Department of Entomology. This development has been manifested, not alone in the addition of an exceptional amount of material, but perhaps equally in other lines, such as in the handling and arranging of this material. A few of the more prominent features of the year's work require special mention.

Foremost stands the acquisition of the Van Dyke collection of Coleoptera, one of the really large and important collections in this country. Dr. E. C. Van Dyke, in deeding his entire collection of beetles to the Academy of Sciences, reserved to himself the control of the specimens during his lifetime with the provision that they shall be incorporated into the general collection of the Academy and that he shall have the privilege of withdrawing such material in any group for the purpose of study, a provision of the highest value to the Academy as it assures a careful and authoritative study of the Academy collection of beetles, group by group or genus by genus, an arrangement that will result in giving the Academy an authentically determined collection in this order of insects, scarcely exceeded in value by any similar collection in this country. It is impossible at present to state the number of specimens in the Van Dyke collection but it can hardly fall short of 100,000. The work of incorporating this collection into that of the Academy is well under way, but, with the present resources of the Academy, it is not likely that it can be completed in less than two years.

Another noteworthy event was the placing in the Academy of the large and valuable collection made by the late Mr. Albert Koebele. This collection was accepted as a loan, primarily to secure it from the very immanent peril of destruction by fire and pests that menaced it in the old wooden building in which it was stored in Alameda, but also with the understanding that, if circumstances allowed, it should become the permanent property of the Academy. The lamented death of Mr. Koebele on December 28, 1924, will bring the final status of this collection up for early consideration, and it is hoped that, through the efforts of Mr. Walter M. Giffard of Honolulu and Mr. E. K. Taylor of Alameda, through whose good offices it came to the Academy, it may soon be incorporated into the Academy collection. The Koebele material is especially rich in the moths of North America, and, with our own collections, would give the Academy a fairly complete representation of the macrolepidoptera (the butterflies and larger moths) of the United States.

Another important addition to the entomological department was a collection of about 500 butterflies, mostly showy tropical forms, that was received from the estate of the late H. M. Holbrook. Mr. Holbrook accompanied his gift with a bequest of $2,000 for the proper preparation and display of the collection, an undertaking that could not otherwise have been satisfactorily accomplished with the funds

available for this department of the Academy's work. The labor of mounting and determining these specimens is in the hands of Mr. J. O. Martin and is being pushed to completion as rapidly as possible.

Among the smaller but important additions to the collections in the Department of Entomology during 1924 may be mentioned a series of 3737 insects taken by Dr. E. C. Van Dyke in China and Japan during the year 1923. This lot covers all orders of insects except the Coleoptera, which form a portion of the Van Dyke collection of beetles already mentioned, and includes an exceptionally interesting series of the Hemiptera of those countries. Other accessions to the department include 1548 insects of all orders taken by Mr. J. O. Martin on a trip to Texas in the spring of 1924, and kindly presented by him to the Academy; 1061 insects presented by Mr. E. C. Burr including a really valuable series of determined European beetles; 1732 miscellaneous insects, mostly Diptera and Hymenoptera, taken by Dr. E. C. Van Dyke at and about Meadow Valley, Plumas County, California; 750 specimens of Diptera taken by Mr. C. L. Fox in southern Oregon, mostly from about Klamath Lake; 155 insects from Dr. W. W. Henderson of Logan, Utah, largely carefully determined grasshoppers from Utah. Smaller but valuable collections were received from Major Chapman Grant, Mr. Ralph Hopping, Dr. E. H. Nast, Mr. Louis Slevin, and others.

The field work of the curator in 1924 consisted of a few short trips, one to Lagunitas as the guest of Dr. Nast, and one to near Yorkville, Mendocino County as the guest of Mr. E. R. Leach. To which should be added more than 1000 moths taken by the curator at his week-end cottage at Mill Valley, principally interesting as showing the succession of these insects throughout the year. These minor trips were only supplemental to an expedition which he made by automobile into Arizona in association with Mr. J. O. Martin, and covering five weeks during July and August. Nearly a week was expended in the trip to and from Yuma, where the collecting began. From Yuma the route lay by way of Gila Bend to Phoenix and Florence, to Oracle, with a side trip to the summit of Mt. Lemon in the Santa Catalina Mts., to Tucson, Nogales, Patagonia, and to Carr Canyon in the Huachuca Mts. The return was over the same route with a stop at Florida Canyon in the Santa Rita Mts. and at Sabino and Pepper Sauce Canyons in the Santa Catalinas. The mounting of the material taken is not yet completed, so the number of specimens taken cannot be stated, but it certainly will run well over 18,000. Previous to this expedition, the Academy possessed from Arizona only the specimens picked up by Mr. Slevin during his work on the reptiles of that region, so the material secured last summer is most valuable in that it gives the Academy a fair representation of the very interesting Sonoran fauna, which finds its center of distribution in southern Arizona and northern Sonora.

From what has been said it will be seen that it is impossible to make any very accurate estimate of the number of specimens added

to the Department of Entomology during 1924. The smaller lots already prepared and distributed have added 12,076 specimens, leaving the figures for the Arizona expedition, the Van Dyke collection and the Koebele collection, should that finally be secured, for separate mention next year.

The determination of material has advanced in all orders, but special mention should be made of the assistance given us by Messrs. Barnes and Benjamin in the determination of moths, and by Prof. Cockerell and Miss Grace Sandhouse in the Hymenoptera. Prof. Cockerell has worked over the more uncertain and interesting forms in several families of the bees among our North American material and Miss Sandhouse has completed the study of our Osmias. The results of her studies and much of that done by Prof. Cockerell have already been published and it is hoped the rest will soon be in print.

Another interesting feature of the work of the department is the institution of a "unit" system of arrangement, similar to that in use in the United States National Museum. By this system the specimens are arranged in small cork-lined boxes, preferably one species to a box. These boxes are about one inch in depth and 3 by 3½ inches in size, with half units and double units. As the specimens are arranged in these boxes they are placed in glass-covered trays about 18 by 20 inches in size which fit like drawers into metal-covered cases. By this system the first cost is a little greater than for the cork-lined trays formerly used, but the final cost must be considerably less, as no rearrangement is required as the collection grows, the shifting of the units being but a moment's work. So far, this system has been adopted for the Coleoptera and Hymenoptera only, but the plan is to extend it to include the Hemiptera and Diptera, and possibly other groups of the smaller insects.

Another interesting feature of the work of the department of entomology is the launching of a new entomological periodical. The members of the Pacific Coast Entomological Society have felt for some time that western entomology should have some representation among entomological serials, so last spring the society appointed a committee to perfect plans, which resulted in the founding of a quarterly publication, of 48 pages each issue, called the Pan-Pacific Entomologist, the initial number being that for July, 1924. The Committee has had to raise considerable money by private subscription in addition to a generous appropriation by the Academy of Sciences to carry it through its first year. The curator was appointed editor and the undertaking becomes in a degree one of the activities of this department. The new periodical is not yet on a self-supporting basis, and can hardly hope to be for another year or two, but the results attained seem to be well worth the effort.

Mr. J. O. Martin acted as part-time assistant during a portion of the past year but for a part of the time the curator had to do what he could single-handed. With the prospect of a full-time assistant

during 1925 it is hoped that the work in the department can be kept more nearly up to date than in the past.

The general field of effort opening before the department of entomology is advancing and widening out much faster, perhaps, than the resources of the department will allow it to follow. Material is coming in faster than it can be properly cared for and case equipment is quite unable to keep pace with the growth of the collections. The large collection of Hemiptera belonging to the curator is only waiting for time and cases to be incorporated into the general collection of the department, which, when done, will give the Academy possibly the most complete collection of North American Hemiptera in the country, and other collections of insects will come as soon as the Academy is prepared to care for them.

Edward P. Van Duzee, *Curator.*

Department of Exhibits

During the past year the chief taxidermist of the Academy, Mr. Frank Tose, has completed four more of the small habitat groups that are eventually to occupy all of the spaces between the large groups already installed in the exhibition halls of the Academy.

The four new panel groups are: Lewis Woodpecker *(Asyndesmus lewisi),* Yellow-bellied Marmot or "Woodchuck" *(Marmota flaviventer flaviventer),* Antelope Ground Squirrel *(Ammospermophilus leucurus leucurus),* and Desert Wood Rat *(Neotoma intermedia desertorum).*

Mr. Tose also spent considerable time in the field collecting specimens and accessory material for other groups to be installed as time permits. For this purpose he passed three weeks in Riverside County and about six weeks in Modoc County, California, in company with the curator and party, besides making short local trips with the same object in view. Some of the material so obtained has been used for the arranging of more of the portable groups of birds and mammals, which are in constant demand for school use. Mr. Tose also made a trip to Truckee for the purpose of obtaining material to be used in the re-arrangement of the Grizzly Bear Group, work which occupied him several weeks. For four weeks during the fall, Mr. Tose devoted his time to the work involved in the reconstruction of the tropical pool in the Steinhart Aquarium.

Mr. Tose has had under his tuition as student assistants Mr. C. P. Russell, Yosemite Park Naturalist, who passed a number of weeks in the early part of the year in the department; Mr. James F. Campbell, who came to the department on the first of December and who plans to remain with it during the coming year; and several high school students, who are sufficiently interested in the subject to spend much of their spare time in learning taxidermy and accessory work. With the assistance given by these students, Mr. Tose, in addition to his other work, succeeded in completing six more of the portable school groups as follows: California Shrike, Sierra Chickaree, Gila

Woodpecker, Spiny Pocket Mouse, Golden-mantled Ground Squirrel, and one containing sandpipers and other marsh birds.

Material for this department has been received as follows: *By expedition,* 16 mammals and 16 birds; and accessories for groups. *By gift,* Mrs. Constance Campbell, 5 specimens; and Mr. A. K. Macomber, 1.

The most valuable gift, other than habitat groups, that has ever been received by this department is that of a mounted Gorilla *(Gorilla gorilla beringeri),* from the Birunga Mountains in Belgian Congo. During a visit to England the attention of Mr. A. K. Macomber, of California, was so attracted by this fine specimen of the gorilla family on sale, that he purchased it and presented it to the Academy. This specimen is now on exhibition in the Mammal Hall of the Museum, where it has greatly aroused the interest of the visiting public.

Joseph Mailliard, *Curator.*

Department of Herpetology

At the beginning of the year 1924 the Academy's collection of reptiles and amphibians numbered 53,138 specimens. There have been added during the year 2,895 specimens, so that the collection has grown to 56,033 specimens.

The number of specimens added during each of the past six years has been about as follows: In 1919, 2666; in 1920, 1466; in 1921, 5002; in 1922, 4934; in 1923, 2132; and in 1924, 2895 specimens.

Gifts of specimens during the year have been received as follows: From Dr. H. L. Lyon, 4 specimens; Steinhart Aquarium, 20; B. Foster, 1; L. Knight, 1; Richard P. Erwin, 42; Dr. John Van Denburgh, 94; L. M. Klauber, 143; Dr. Thomas Barbour, 7; C. L. Fox, 1; Mr. E. P. Van Duzee, 1; Prof. V. M. Tanner, 1; S. H. Benstein, 1; Carl P. Russell, 2; J. V. Chapelle, 1; Edmund C. Jaeger, 1; Henry L. Helmle, 1; and J. Zenon Pasados, 17.

Specimens have been secured from 9 counties of California as follows: Marin, 3 specimens; Mariposa, 2; Riverside, 67; San Benito, 1; San Bernardino, 1; San Diego, 143; Santa Clara, 104; Santa Cruz, 1; and Sonoma, 1.

Specimens from other localities are: Idaho, 42 specimens; Indiana, 12; Louisiana, 1; Nevada, 2; North Carolina, 9; Oregon, 1; Pennsylvania, 1; Africa, 9; Canada, 12; China, 4; Costa Rica, 1; East Indies, 9; Fiji Islands, 7; Guatemala, 2419; Hawaiian Islands, 6; India, 2; and Philippine Islands, 35.

The department received from the late Dr. John Van Denburgh, through Mr. Douglas Van Denburgh, a valuable library, consisting of 1437 books and separates on Herpetology, and about 200 negatives and prints of west coast reptiles and amphibians, besides many miscellaneous photographs of reptiles.

Three papers were published during the year as follows: Notes on the Herpetology of New Mexico, with a list of species known from that state; Contributions to Oriental Herpetology, I. Sakhalin; On Laticauda schistorhynchus and Laticauda semifasciata.

The classification, labeling, cataloging, and arrangement of the collection was continued during the year.

Field work was carried on in Guatemala, resulting in a collection of 2419 specimens. The thanks of the department are due Señor E. Skinner Klee, Consul General of Guatemala at San Francisco, who very kindly furnished credentials and arranged the necessary details for entering the port of San Jose de Guatemala, and Señor J. Zenon Pasados, at whose invitation a stop of six weeks was made on his plantation near Samayac, where the most valuable part of the collection was secured.

Joseph R. Slevin, *Assistant Curator.*

Library

The growth of the Academy library during 1924 has been somewhat greater than in the preceding year and the administrative work has been kept well up to date. The total additions to the library number 6,637 items, of which 1,640 are publications of societies and institutions received in exchange for the Academy publications, and 3,947 are pamphlets, excerpts, reports, etc., received as gifts. 175 complete volumes were added by purchase and 130 by gift. Of the donations received, the most important was a collection numbering 4,183 items received from the estate of the late Dr. John Van Denburgh, and 690 items presented by Dr. Barton W. Evermann. Among the books acquired by purchase are the following of special interest: Dawson, Birds of California, 4 vols.; Annals of the Lyceum of Natural History of New York, a complete set of this very important serial in 11 vols.; Journal of the Quekett Microscopical Club, 13 vols.; Stettiner Entomologische Zeitung, 25 vols. in 8; Walker, List of the Lepidopterous Insects in the British Museum, a complete set of this very scarce publication in 20 volumes; l'Illustration Horticole, 16 vols., and the Bulletin and Memoirs of the Societie Botanique de France in 71 volumes.

Press of other duties made it necessary for Mrs. Helen Van Duzee to relinquish her duties in the library in May. Later Miss Margaret Dold was appointed as library assistant and entered upon her duties on October 1. Through the faithful efforts of these two, the library work has been kept up to date and some advance has been made along all lines of library activities. All new books have been accessioned as received, exchanges have been collated and placed on the shelves and much has been done to improve the arrangement on the shelves containing the recent accessions, and in arranging and labelling the material in the lower library.

The books and pamphlets in the departmental library of the Steinhart Aquarium have been accessioned, and for a good proportion of these the main catalogue cards have been written. This work has been done in a most satisfactory manner by Miss Lucie Hicks in time she could spare from other duties.

The use of the library has shown a regular and satisfactory increase during the year.

Edward P. Van Duzee, *Assistant Librarian*

Department of Mammalogy

During the year 1924 all of the material belonging to this department has been carefully overhauled by the assistant curator, Miss Mary E. McLellan, who has put into proper condition for preservation practically all of the remaining unprepared osteological specimens. Miss McLellan has also identified many of the heretofore unnamed specimens of mammals and has all of the collections finally so arranged as to be readily available for study and comparison.

Conjointly with that of the Department of Ornithology, considerable field work has been carried on, principally in Modoc County, California, where several species of rodents, not recorded previously from the northeastern part of the state, were taken. Many specimens of the smaller mammals were obtained in April during three weeks passed in Riverside County, California, and several short trips were made in the vicinity of San Francisco with special objects in view.

Accessions to the collections during the year have been as follows: *By expedition,* 337 specimens. *By gift,* Mr. John Addleman (through Dr. G. Dallas Hanna), 1 specimen; California State Department of Agriculture, 1; Mrs. Constance Campbell, 1; Mr. M. Hagiwara, 1; Mr. H. O. Harrison, 4; Master Russell Hendricks, 1; Mr. J. N. Kavanaugh, 1; Mr. A. K. Macomber, 1; Mr. John McLaren, 3; Mr. W. M. Phillips, 2; Mr. C. P. Russell, 6; Steinhart Aquarium, 4; Miss Ruth Tilbury, 1.

Joseph Mailliard, *Curator.*

Department of Ornithology

Considerable additions have been made to the collections of birds and birds' eggs in the past year, and field work has received more than the usual amount of attention. A field party, consisting of Dr. Barton Warren Evermann, Mr. Frank Tose, and the curator, with Mr. Jack Malloch as general assistant, passed three weeks of the month of April in Riverside County, California, chiefly at Cottonwood Spring, collecting specimens and accessory material. A party consisting of Mr. Tose, the curator, and assistant Malloch, spent the time from May 20 to June 20, in Modoc County, California, and the first 10 days of May in Tehama County, on the way north from San Francisco. Assistant Malloch and the curator returned to Modoc County on September 3, and remained there until October 9. All of these field trips were made with automobile and full camping equipment, and during their course much excellent material for the collections and for the habitat groups was obtained and new light was thrown upon the matter of the geographic distribution of some of the birds and mammals of the state.

The work of identifying, arranging, and taking care of the specimens belonging to the department has been carried on by the assistant curator, Miss Mary E. McLellan. Frequent accessions to the collections demand that more and more time be given to curatorial work, but, in spite of this,

Miss McLellan has matters so well in hand that she has undertaken some systematic work in addition to her regular duties.

The oölogical division of this department has received two collections worthy of note. One of them was from Dr. Harry R. Painton, one of the founders of the Cooper Ornithological Club. This collection was made chiefly in the '90's, and contains some material that is constantly becoming more difficult to secure. The other collection was that made by the late Dr. John Van Denburgh, and was donated to the Academy by his brother, Mr. Douglas Van Denburgh. These two collections add very materially to those already installed in this department.

Accessions to the Department of Ornithology during 1924 are as follows: Bird skins: *By expedition,* 497 specimens. *By gift,* Mr. H. Babcock, case containing two mounted specimens; Mr. E. W. Gifford, 1 specimen; Mrs. J. C. Hawver, 2; Mr. J. N. Kavanaugh, 1; Mr. E. H. Kennedy, 1; Mr. Leverett Mills Loomis, 1; Mr. Thomas P. Mailliard, 1; Mr. John McLaren, 1; Mrs. Will Morris, 1; Dr. Harry R. Painton, 43; Mr. C. H. Sawyer, 1; Mr. Chandler Smith, 6; Mr. J. W. Steinbeck, 1; Dr. J. M. Stowell, 1; Mr. Frank Tose, 2; Dr. John Van Denburgh, 1; Mrs. Johanna Wilkens, 1.

Nests and birds' eggs: *By expedition,* 6 sets (14 eggs). *By gift,* Mrs. Elizabeth Brickdale, 1 set and nest; Dr. Barton Warren Evermann, 1 nest; Miss Clare Elizabeth Johnson, 1 set and nest; Mr. John Ward Mailliard, 1 set and nest; Mr. Joseph Mailliard, 28 sets; Mr. J. W. Martin, 1 set; Dr. Harry R. Painton, 386 sets (1160 eggs) and 36 nests; Dr. John Van Denburgh (through Mr. Douglas Van Denburgh) 1311 sets (4667 eggs) and 16 nests.

Joseph Mailliard, *Curator.*

Department of Paleontology

The activities of the Department of Paleontology during 1924 have consisted very largely in microscopical research in connection with the production of petroleum in California. The arrangement with the Pacific and Associated oil companies mentioned in the report for 1923 was continued during the year. In May it was decided that the investigations had shown so decided a value to the petroleum industry that these companies established a fully equipped laboratory at their downtown office, 79 New Montgomery Street, San Francisco. This was done in order that closer touch could be had with exploration work being conducted than was possible when the investigations were being conducted in the Academy building.

The arrangement made has resulted in the acquiring by the Department of incomparable collections of microscopical fossils. The institution also justly deserves most of the credit for bringing this branch of science into immediate economic usefulness, which must, of course, be the guiding stimulus, ultimately, of all research. The appreciation of the actual value of the work is best stated by others, but it is fitting to note that all of the young men who have been associated

with the curator in the work thus far have been placed in responsible positions in charge of microscopical examinations for various large producing oil companies. A list of these men is well worth recording, and is as follows:

Mr. Hershel L. Driver, Standard Oil Company of California.
Mr. Marcus A. Hanna, Gulf Production Company of Texas.
Mr. Roy T. Hazzard, John Hayes Hammond interests.
Mr. H. M. Horton, Marland Oil Company of California.
Mr. Donald R. Hughes, Marland Oil Company of California.
Mr. Merle C. Israelsky, Rycade Oil Company of Texas.

Investigations in other branches of paleontology than microscopy have not been allowed to lapse because of the activity with the smaller fossils. A large collection of mollusca was made by Mr. L. C. Decius and the Curator in western Washington and Oregon.

A very large collection of bones of vertebrate animals, chiefly marine, was obtained at Shark Tooth Mountain, Kern County, California. This was made possible through cooperation of the Pacific Oil Company, on whose property the deposit lies, and particularly through the activities and interests of Mr. Charles Morrice of the company. For four months, Mr. Tom Harbert was employed by the Academy to assist in the excavation work and altogether over a thousand bones were taken out. The collection is now in the hands of Dr. Remington Kellogg in Washington for study and report through aid granted by the Carnegie Institution of that city.

Routine work of the department was carried on by a full time assistant, Mr. Merle C. Israelsky, until his departure in February, and much in the way of cataloging and arranging of collections in systematic order was accomplished. No one was available for such duty again until October, when Mr. Eric K. Jordan came to the department in the same capacity. Mr. Jordan has specialized thus far on late Tertiary and Pleistocene sediments and it was particularly fitting that he should begin the systematic assembling of the very large collections of these ages made by the curator in Lower California in 1922, when a member of the joint expedition sent to Guadalupe Island and elsewhere by the Academy and other institutions. Detailed work on these collections had been practically completed at the end of the year, much to the gratification of western students who have heretofore had no collection from that region for consultation.

Work on the marine shells and fossils collected by the Academy's expedition to the Islands in the Gulf of California in 1921 was continued by Dr. Fred Baker of Point Loma, California, and, although completion of reports seems long delayed, very satisfactory progress has been made, when the enormous size of the collections concerned is taken into consideration.

Outstanding loans of material from the department for scientific study at the close of the year were as follows:

Dr. Fred Baker, Point Loma, California, recent mollusks from the Gulf of California.

Dr. Paul Bartsch, U. S. National Museum, Washington, D. C., recent mollusks from the Galapagos Islands.

Dr. S. S. Berry, Redlands, California, recent chitons of the Gulf of California.

Prof. Bruce L. Clark, University of California, Berkeley, fossils mollusks from western states.

Dr. Remington Kellogg, U. S. Department of Agriculture, Washington, D. C., Miocene vertebrates from Kern County, California.

Prof. F. M. MacFarland, Stanford University, California, recent marine mollusks from the Gulf of California.

Dr. Mary J. Rathbun, U. S. National Museum, Washington, D. C., fossil crustaceans from western states.

Prof. Hubert Schenck, Stanford University, California, fossil mollusks from western states.

G. Dallas Hanna, *Curator.*

Steinhart Aquarium

The Steinhart Aquarium continues to be one of the most popular public institutions in the city. The attendance, especially on Sundays and holidays, is always too great for comfort or for seeing the specimens to the best advantage. The total attendance during the year was 1,180,352.

On January 1, 1925, the specimens in the tanks numbered 6208, representing 301 species. This is an increase of 124 species over that of last year. These are divided among the animal kingdom as follows:

Mammals	11 specimens.....	4 species
Birds	1 specimen	1 species
Reptiles	127 specimens.....	39 species
Batrachians	56 specimens.....	3 species
Fishes 5744	specimens.....239	species
Invertebrates	269 specimens.....	15 species
Total.....6208	specimens.....301	species

This is exclusive of 10,000 eggs and numerous young fish in the hatchery which is now in operation and a source of great interest and instruction to visitors.

Tropical fishes from the Hawaiian Islands now number 401 specimens of 66 species, and form a most attractive exhibit.

All of the adult seals and sea lions in the outdoor pools have continued in excellent health; the only mishap being that which befell the baby Leopard Seal born in Pool A, May 1, 1924. This young seal choked to death on a peanut hull thrown into the tank by a careless

bystander. An additional female Leopard Seal was put into this tank December 12, 1924.

The Swamp has been rearranged by Mr. Tose and Mr. Clark and presents a very attractive appearance.

The Laboratory has been provided with lockers, aquariums, and an adequate equipment of microscopes, microtomes, stains and reagents, so that research work may be undertaken by qualified persons.

The Library has been catalogued by Miss Hicks and all pamphlets have been filed under their respective subjects.

The personnel of the Aquarium remains the same except a few minor changes in the engineering force. It is a pleasure to state again that all members of the Aquarium staff have performed their duties willingly and efficiently; they have put in many hours of overtime without complaint and without compensation. I hereby wish to acknowledge my appreciation of these services and to extend my thanks for the same.

Alvin Seale, *Superintendent.*

Accessions to the Museum and Library for 1924

Addleman, John, 727 Victoria Street, San Francisco: 1 Redwood weasel *(Mustela xanthogenys munda),* in flesh, from San Francisco, Calif. Gift.

Aldous, Harry, 228 West First North Street, Salt Lake City, Utah: *Catoptrophorus s. inornatus,* ¼n, ¼, and skin; *Numenius americanus,* ¼n, ¼. Exchange.

Allyne, Miss, 2609 Gough Street, San Francisco: A shoe worn by the women of Damascus in 1893, the inlaid parts being camel's bone and silver; a pipe, believed to have come from the Philippines; a small Philippine pipe, 1898; and 1 photograph. Gift.

Anthony, A. W., San Diego, California: Sixteen land shells from Turtle Bay, Lower California; 1 crab; and 4 fish *(Azurina hirundo).* Gift.

Arnold, Arboretum, Boston, Mass.: 141 specimens of trees and shrubs from Western States. Exchange.

Bailey, H. H., P. O. Box 5, Miami Beach, Florida: *Passerherbulus nigrescens,* n/3, and pair of skins; *Cerchneis sparveria paula,* 2/4; *Aphelocoma cyanea,* n/4. Exchange.

Babcock, H., 2660 Scott Street, San Francisco: 1 glass case containing 2 mounted birds *(Scolopax rusticola* and *Perdix perdix).* Gift.

Baker, Dr. Fred., Point Loma, California: 45 specimens of mollusks (4 species), one cotype, of land snail from Brazil; 6 lots miscellaneous marine and fresh water mollusks and brachiopods and 3 cotypes of *Bernardina bakeri* Dall; 1 specimen of *Dentalium splendidulum* from Lower California; 31 species of marine shells from Point Loma, Calif. Gift.

Bard, Mrs. Mary, Hueneme, California: 9 specimens of exotic plants from Ventura County, Calif. Gift.

Benstein, S. H., San Francisco: One salamander from Marin County, Calif. Gift.

Bethel, Ellsworth, State Building, Denver, Colorado: One specimen of plant from Boulder, Colorado. Gift.

Blanc, A., San Francisco: One piece of petrified wood from Calaveras County, which burned and turned to jasper in the San Francisco fire of 1906; 10 pieces of native antimony from Erskin Creek, Kern County, Calif.; one Indian stone bowl with lid from near the City of Mexico. Gift.

Block, Roland M., 3522 Fulton Street, San Francisco: Two botanical specimens from Kings Mountain, California. Gift.

Bolton, Miss Florence, Hueneme, Calif.: 12 botanical specimens from Ventura County, Calif. Gift.

Brickdale, Mrs. Elizabeth, 1315 Stanyan Street, San Francisco: Eggs of Western meadowlark *(Sturnella neglecta),* 1/5n, from San Francisco. Gift.

Brimley, C. S., Raleigh, North Carolina: Six salamanders from North Carolina. Purchase. Six salamanders from North Carolina. Exchange.

California State Department of Agriculture: One *Herpestes mungo,* in flesh, from India. Gift.

California State Mining Bureau: Lower jaw of Desmostylus, 2 lots of tertiary fossils, all from Mendocino Coal Mine, Dos Rios, California. Loan.

Campbell, Mrs. C., Mill Valley, Marin County, Calif.: One *Neürotrichus gibbsii hyacinthinus,* in flesh, from Marin County, California; 5 *Sylvilagus audubonii audubonii,* from Golden Gate Park, San Francisco. Gift.

Canton Christian College, Canton, China: 476 specimens of Chinese plants. Purchase.

Chandler, Miss Katherine, 113 Duncan Street, San Francisco: One botanical specimen. Gift.

Chapelle, J. V., Hesperia, Calif.: One rattlesnake from California. Gift.

Clemens, Mrs. Joseph, Manila, Philippine Islands: 64 specimens of plants from Philippines. Gift. 742 botanical specimens, chiefly from Texas and Oklahoma. Purchase.

Coleman, George A., Berkeley, Calif.: Nine specimens of freshwater bivalves from Rae Lake, Calif. Gift.

Coleman, R. A., California Fish and Game Commission: Two lots of freshwater mollusks from the Klamath River region. Gift.

Cornwall, Ira E., Victoria, British Columbia: Three species of barnacles, 40 specimens, from British Columbia; Plesiotype of *Conchoderma auritum;* 3 species of crabs, 4 specimens, from British Columbia. Gift.

Cramsie, Mrs. E. C., Smartsville, Calif.: One botanical specimen. Gift.

Cummings, Mrs. J. H., Wilmington, North Carolina: Five botanical specimens. Gift.

Dale, W. E. S.: One piece of lava and 17 land shells from Hawaii. Gift.

Davison, Edgar B., San Luis Obispo, Calif.: One botanical specimen from Cambria. Gift.

Donohoe, Mrs. Joseph A., 8 Oak Park Grove, Menlo Park, Calif.: One specimen of exotic plant. Gift.

Downieville High School, Sierra County, Calif.: Two botanical specimens. Gift.

Eastwood, Miss Alice, California Academy of Sciences, San Francisco: 290 specimens of Hawaiian plants; 24 botanical specimens from Ventura County; 8 botanical specimens from Mt. Hamilton. Exploration. 2 botanical specimens from Mt. Tamalpais; 27 specimens of California plants. Gift.

Ehrhorn, Edward M., Honolulu, Hawaiian Islands: 280 specimens (82 species) of land shells from Hawaii. Gift.

Erwin, Richard P., Boise, Idaho: Five snakes, 5 lizards, 19 frogs from Idaho. Gift.

Evermann, Dr. Barton Warren, California Academy of Sciences, San Francisco: 690 books and pamphlets and one nest of California Jay *(Aphelocoma californica californica)* from Contra Costa County, Calif. Gift. 78 specimens of plants from Cottonwood Spring, Calif., and five specimens of minerals from northeast of Mecca, Calif.; three sets of eggs of Pigeon Guillemot *(Cepphus columba),* one albino young Steller Sea Lion *(Eumetopias stelleri),* from San Mateo County, Calif., and 8 specimens of plants from Año Nuevo Island, Calif. Exploration.

Fouke Fur Company, St. Louis, Missouri: 800 feet of motion picture films of Fur Seals. Gift.

Fox, C. L., 1621 Vallejo Street, San Francisco: 156 freshwater shells from Upper Klamath Lake, Oregon; 30 botanical specimens from Tulare County, Calif. Gift.

Frevert, Emily H., 3535 Fruit Street, San Diego, Calif.: 81 specimens of begonias. Gift.

Galapagos Expedition 1906: 856 fossils from 10 localities, 8 on Galapagos Islands, 1 on Coccos Island, 1 on Cedros Island. Exploration.

Giffard, Walter M., Honolulu, Hawaii: 563 specimens of freshwater shrimp *(Caridina brevirostris* Stimpson), from Pohoiki, Lower Puna, Island of Hawaii, August 15, 1924. Gift.

Gifford, Edward Winslow, Museum of Anthropology, Affiliated Colleges, San Francisco: 1 *Henicophaps albifrons,* in flesh, from New Guinea. Gift.

Gray Herbarium, Harvard University, Cambridge, Mass.: 1890 specimens of plants, 1559 unmounted and 421 mounted from Idaho, California, Venezuela, Curaçao, Peru, Bolivia, Chile, China, Long Island, Quebec. Exchange.

Hagiwara, M., Japanese Tea Garden, Golden Gate Park, San Francisco: 1 monkey (Semnopithecus?) in flesh. Gift.

Hall, Dr. H. M., Carnegie Institution of Washington: Three specimens of California plants, also 7 mounted and 86 unmounted specimens of plants from the Carnegie Institution. Gift.

Hanna, Dr. G. Dallas, California Academy of Sciences, San Francisco: 36 freshwater shells from Donner Lake and Truckee River, Calif.; Geological Survey of Kansas, Vol. 9, 1908; U. S. National Museum, Vol. 64, Art. 13, 1924; University of California Publications in Zoology, Vol. 24, No. 3, 1924; 5 excerpts; Proceedings United States National Museum, Vol. 64, Art. 3, pp. 1-6; Proceedings United States National Museum, Vol. 64, Art. 8, pp. 1-28; Condor, March-April, 1924; Bryant Walker's Ancylidæ of South Africa; University Publication in Zoology, Vol. 22, No. 14, 1924; United States Geological Survey Map of Alaska, map of United States, Index map of United States (2 maps), 5 circulars; Academy of Natural Sciences, Proceedings, 12 excerpts; United States National Museum Bulletin 100, Vol. 5, and 115; Proceedings 4 excerpts; North American Fauna, No, 45; California State Mining Bureau, Mining in California, Vol. 18, No. 1, 5, 6, 9, 10, 11, 19; No. 2, 3, 4; California State Mining Bureau Preliminary Report No. 8; Michigan University Occasional Papers. No. 106, 135 (16 excerpts, 12 pamphlets). Gift.

Hanna, Marcus A., Instructor in Geology, University of Washington, Seattle, Washington; 15 *Dendrastus excentricus* (dried specimens). Gift.

Harlow, B. C., State College, Pennsylvania: Tennessee Warbler, n/7 (152), n/6 (147); Bay-breasted Warbler, n/6; Cape May Warbler, n/6; Lucy Warbler, n/4; Blue-winged Warbler, n/5; Myrtle Warbler, 1/4; Junco, 1/5; White-throated Sparrow, 1/4; Blue-headed Vireo, 1/4; Marbled Godwit, 1/4 (2-13-24). Exchange.

Harrison, H. O., 1200 Van Ness Ave., San Francisco: Hides and horns of 4 Rocky Mountain Sheep from Yukon District, Canada. Gift.

Hart, Cecil, Route 6, Box 432, Los Angeles, Calif.: 53 botanical specimens from southern California; 19 botanical specimens from San Bernardino County. Gift.

Haslett Warehouse Company, 3rd and Townsend Street, San Francisco: 1 box of shells and curios originally collected by George Woodworth. Gift.

Hawver, Mrs. J. C., Bolinas, Calif.: 1 Western Redtail Hawk and 1 Dusky Horned Owl, both in flesh, from Marin County, Calif.

Hebard, Morgan, Academy of Natural Sciences, Philadelphia, Penn.: *Capnobotes fuliginosus* Thomas, 1 male, 1 female; *Ateloplus luteus* Caud., 1 male, 1 female; *Eremopedes balli* Caud., 1 male, 1 female. Exchange.

Hendrick, Master Russell, 1166 Guerrero Street, San Francisco: 1 *Mus musculus musculus,* in flesh from Golden Gate Park, San Francisco. Gift.

Hudson, Dr. W. J., Ukiah, Calif.: 1 specimen of plant. Gift.

Hunt, Mrs. Clara, St. Helena, Calif: One botanical specimen from Napa County, Calif. Gift.

Jackson, Mrs. Belle Richardson, San Rafael, Calif.: 9 botanical specimens from Mt. St. Helena.

Jaeger, Edmund C., Riverside, Calif.: One lizard from Riverside County, Calif. Gift.

Johnson, Miss Clara Elizabeth, City Hall, San Francisco: Nest and eggs of California Shrike *(Lanius ludovicianus gambeli),* from Alameda County, Calif. Gift.

Jordan, David Starr., Stanford University, Calif.: 35 shark teeth. Gift.

Kavanaugh, J. N., California Academy of Sciences, San Francisco: 1 *Phasianus torquatus,* in flesh, and 1 *Sciurus niger rufiventris,* from Golden Gate Park, San Francisco. Gift.

Kelly, Mrs. G. Earl, 1311 Grand Street, Alameda, Calif.: 8 specimens of plants from Lake Tahoe; 49 botanical specimens from northern California. Gift.

Kennedy, E. H., 1369 Sacramento Street, San Francisco: One *Pelecanus californicus,* in flesh, from San Francisco. Gift.

Kerr, Mrs. Thomas F., 949 14th Street, Pacific Grove, Calif.: Two specimens of plants. Gift.

Kidder, Mrs. Anna, Berkeley, Calif.: Three specimens of plants from Shasta County, Calif. Gift.

Klauber, L. M., San Diego, Calif.: One snake from Lower California; 1 snake from San Diego County, Calif. Gift.

Knight, L., Inverness, Calif.: One salamander from Marin County, Calif. Gift.

Lastreto, C. B., 260 California Street, San Francisco: California Academy of Sciences Proceedings, Vol. X, Index, Vol. XI Annual Report, Vol. XII, No. 7-23 and 30, Vol. XIII, No. 1-4, 6-11, 2 copies each of 12 and 13 and 14. Damager copies Vol. XIII, No. 7-11; Eradication of Farm Weeds by Sulphate of Iron. Gift.

Loomis, Leverett Mills, Sutter Street, San Francisco: One Valley Quail *(Lophortyx californica californica),* in flesh, from Golden Gate Park, San Francisco. Gift.

Macomber, A. K., Burlingame, Calif.: One mounted specimen of Gorilla *(Gorilla gorilla beringeri)* from Belgian Congo, Africa. Indefinite loan.

Mailliard, John Ward, 2230 Green Street, San Francisco: Nest and eggs of California Creeper *(Certhia familiaris occidentalis),* from Mendocino County, Calif. Gift.

Mailliard, Joseph, California Academy of Sciences, San Francisco: 26 bird skins from Tehama County, Calif.; 13 bird and 11 mammal skins from Marin County, Calif.; 1 box of accessories for groups; 9 mammals in flesh, from Marin County, and 82 bird and 21 mammal skins from Modoc County, Calif.; 119 bird skins and 39 mammal skins and skulls from Modoc County, Calif; nesting hole of California Woodpecker and other accessories; 60 mammal skins from Modoc County, and 18 mammal skins and skulls from Tehama and Modoc counties, 41 mammal skins and 34 skulls from Modoc County, and 6 mammal skins from Tehama and Modoc counties, Calif.; 39 bird skins from Tehama and Modoc counties, 34 bird skins and fragments of shells from crane's nest, and Nevada Redwing, 1/3n, from Modoc County, Calif.; 48 bird skins and 1 set of eggs from Modoc County, Calif.; 33 mammal skins and skulls, 3 mammal skins and 1 bird skin from Tehama County, Calif.; 7 specimens of mammals and 6 specimens of birds from Marin County, Calif.; 141 bird skins and 102 mammal skins and 1 skull of Desert Bighorn *(Ovis canadensis nelsoni),* from Riverside County, Calif. Exploration.

28 sets of eggs from California, South Dakota, Connecticut, New York and Vermont. Gift.

Mailliard, Thomas P., San Francisco, Calif.: 1 *Strix occidentalis caurina,* in flesh, from Mendocino County, Calif. Gift.

Malloch, John, California Academy of Sciences, San Francisco: 1 *Microtus californicus californicus,* from Golden Gate Park, San Francisco. Gift.

Martin, W. J., Steinhart Aquarium, San Francisco: 1 large mass of salt crystals (Sodium chloride) from Moss Landing, Monterey County, Calif.; 1 set of *Tyto alba pratincola,* from San Joaquin County, Calif. Gift. 1 (Indian) flesher, Derby Dam, Nevada. Gift. 1 mortar and pestle found 4 miles north of Grayson, California, on the shore of the San Joaquin River. Exploration.

McAllister, M. Hall, 485 California Street, San Francisco: 1 calendar (1901) Transportation; 1 calendar (1900) Catlin Indian paintings; 1 picture of Buffalo Bill. Gift.

McIntosh, Mrs. W. C., San Francisco, Calif.: 1 tortoise. Gift.

McLaren, John, Golden Gate Park, San Francisco: 1 skull of *Alces* sp., 1 *Aix sponsa,* in flesh, 1 *Cervus axis,* fawn, in flesh, and 1 *Sciurus niger rufiventris,* in flesh, from Golden Gate Park, San Francisco. Gift.

Meiere, Mrs. Ernest, Los Altos, Calif.: 2 specimens of cultivated plants. Gift.

Mertens, Dr. Robert, Frankfort-a-Main, Germany: 18 frogs from Africa, East and West Indies. Exchange.

Michaels, Mrs. Enid, Yosemite, Calif.: 3 specimens of plants, Yosemite. Gift.

Missouri Botanical Gardens, St. Louis, Missouri: 192 specimens of North American plants. Exchange.

Morrice, Charles, Bakersfield, Calif.: 6 rattlesnake rattles; 27 lots of vertebrate fossils, 83 specimens of bones and teeth of marine vertebrates from Shark Tooth Mountain, Kern County, Calif. Gift.

Morris, Mrs. Will, 879 Turk Street, San Francisco: 1 canary. Gift.

Murray, George K., Hotel Kinnard, Cleveland, Ohio: "The Irish Wolfdog" by Edmund Hogan. Gift.

Musee Zoologique de L'Academie des Sciences de Russie, Petrograd, Russia: 3 *Salamandra caucasica;* 3 *Molge vittata;* 2 *Salamandra keyserlingii;* 2 *Ranidens sibericus;* 1 *Pelodutes caucasucus;* 3 *Bufo raddei;* 1 *Hyla stepheni;* 1 *Rana amurensis;* 3 *Rana macrocnemis;* 1 *Rana avarlis altaica.* Exchange.

Oldroyd, Mrs. I. S., Stanford University, Calif.: Henry Hemphill Catalogue of North American Shells. Gift.

Orpet, E. O., Santa Barbara City Hall, Santa Barbara, Calif.: 3 botanical specimens from Santa Barbara, Calif. Gift.

Pacific Oil Company, San Francisco, through Charles Morrice: 150 shark teeth, 5 sea lion teeth, 5 sea cow teeth, 30 sting ray stings, 6 fish bones, bird bones, and other animal bones, all fossil; 4 boxes (about 150 pieces) of fossil mammalian bones, largely whales, from Shark Tooth Mountain, Kern County, Calif.; 4 boxes of marine and terrestial mammalian bones from Kern County Miocene; 4 boxes (about 400 pieces) of fossil bones from Shark Tooth Mound, Kern County, Calif; 1 lot of Pleistocene mollusks from Baldwin Hills, Calif. Gift.

Painton, Dr. Harry R., 4601 Mission Street, San Francisco: 43 bird skins: 386 sets of eggs (1160 eggs); and 36 nests, principally Californian. Gift.

Peacock, Mary A., Crescent City, Calif.: 1 botanical specimen from Del Norte County, Calif. Gift.

Peers, Miss Susie M., California Academy of Sciences, San Francisco: current issues of "Science." Gift.

Pell, Mrs., Forest Ave., Pacific Grove, Calif.: 1 cultivated plant. Gift.

Philadelphia Academy of Natural Sciences, Philadelphia, Penn.: 2 specimens of freshwater shells from Siskiyou County, Calif., part of type lot. Gift.

Phillips, Mr., Park Game Warden, Golden Gate Park, San Francisco: 1 *Mustela xanthogyenys munda,* in flesh, and 1 *Epimys norvegicus,* in flesh, from Golden Gate Park. Gift.

Purdy, Carl, Ukiah, Calif.: 3 botanical specimens from Oregon. Gift.

Reagan, Albert B.: 44 specimens of *Lymnæa stagnalis appressa* Say, fossil, from White Cone, 45 miles north of Holbrook, Ariz. Gift.

Rixford, G. P., San Francisco: 1 botanical specimen from Placerville, Calif. Gift.

Rodda, Mrs. A. F., 2616 Sacramento Street, San Francisco: 2 specimens of plants from Marin County, Calif. Gift.

Russ, R. A., Olympic Club, San Francisco, through W. J. Martin: 12 crystals of salt from salt mine at Berchtersgaden, Russia. Gift.

Russell, C. P., Yosemite Museum, Yosemite, Calif: 3 *Ochotona schisticeps muiri* and 3 *Citellus beldingii,* from Tuolumne Meadows, Calif: 2 lizards from Yosemite Valley. Gift.

Sandhouse, Miss Grace, University of Colorado, Boulder, Colorado: 32 bees, duplicates from our collections of Western Osmias. Exchange.

Sawyer, C. H., 265 City Hall, San Francisco: 1 *Tragopan caboti,* in flesh, from China. Gift.

Sheppard, Louis, Young Men's Christian Association, San Francisco: Operculum of *Turbo marmoratus,* from Honolulu. Gift.

Schenck, M., Stanford University, Calif.: 1 lot of freshwater fossils from California. Gift.

Smith, Chandler, 149 Palm Ave., San Francisco: 1 *Colaptes cafer collaris,* in flesh, and 5 *Melospiza melodia pusillula,* from San Mateo County, Calif. Gift.

Stacey, J. W., Flood Building, San Francisco: 2 botanical specimens. Gift.

Stanford University, California: 2 snakes from Lower California, Mexico. Gift.

Steinbeck, J. W., 611 Bristol Avenue, Stockton, Calif.: 1 *Columba fasciata fasciata,* in flesh, from San Joaquin County, Calif. Gift.

Steinbeck, W. P., 1029 W. Hunter Street, Stockton, Calif.: 57 botanical specimens from Tuolumne County, Calif. Gift.

Steinhart Aquarium, San Francisco: 1 turtle and 4 frogs from Lake Maxinkuckee, Indiana: 2 skulls of *Callorhinus alascanus,* from Pribilof Islands, Alaska; 2 salamanders from California; 2 *Phoca richardi geronimensis,* in flesh, from San Francisco. Gift.

Stockel, C. B., Columbia, Tuolumne County, Calif.: 1 hornets' nest, *Vespa maculata.* Gift.

Storer, Prof. Tracy I., Davis, Calif.: Occasional Papers of the California Academy of Sciences, Vol. 6, 2 copies; California Fish and Game, 2 excerpts. Gift.

Stowell, Dr. J. M., 632 Haight Street, San Francisco: 1 *Mergus americanus,* in flesh, from Colusa County, Calif. Gift.

Sutliffe, Mrs. E. C., 700 Lake Street, San Francisco: 3 botanical specimens from Marin County, Calif. Gift.

Sweden (World's Fair Exhibit): 100 sheets of sulphite wrapping paper; 100 sheets colored writing paper; 100 sheets white bank paper; 100 sheets tissue paper. Gift.

Tilbury, Miss Ruth, 62 Concord Street, San Francisco: 1 mounted specimen of Spitz dog. Gift.

Tose, Frank, California Academy of Sciences, San Francisco: 5 *Lobipes lobatus* and 1 *Colymbus nigricollis californicus,* from San Mateo County, Calif. Gift.

Unsworth, Mrs. J. A., 8 Le Roy Place, San Francisco: 1 botanical specimen from San Mateo County, Calif. Gift.

Van Denburgh, Douglas, Los Gatos, Calif.: 1311 sets (4667 eggs) and 16 nests of birds, mainly from California. The John Van Denburgh collection. Gift.

Van Denburgh, Dr. John, San Francisco: One skull of *Tyto alba pratincola* from San Benito County, Calif.; about 1000 specimens, 250 (estimated) species, of marine mollusks and other invertebrates, including 2 orange coweries and 32 other species. Gift.

Van Duzee, E. P., California Academy of Sciences, San Francisco: 1 snake in alcohol, from Marin County, California. Gift.

Van Dyke, Dr. Edwin Cooper, Berkeley, Calif: 450 land and freshwater shells from China. Gift.

Wallace, A. D., Camp No. 2, Sugar Pine, Calif: 16 butterflies. Gift.

Walther, Eric, Golden Gate Park, San Francisco: 163 specimens of exotic plants from Golden Gate Park; 36 botanical specimens from Bay region. Gift.

Werdemann, Dr. E., Santiago, Chile: 300 botanical specimens from Chile. Purchase.

Wilder, Mrs. H. C., Carlotta, Humboldt County, Calif.: 7 botanical specimens. Gift.

Wilkens, Mrs. Johanna, California Academy of Sciences, San Francisco: 1 *Spinus pinus,* in flesh, from Golden Gate Park, San Francisco. Gift.

Woodcock, Miss Fidelia, Balboa Park, San Diego, Calif.: One specimen of exotic plant. Gift.

Wright, Elizabeth, Calistoga: One botanical specimen from Mono Lake. Gift.

FINANCIAL STATEMENTS

REPORT OF THE TREASURER

For the nine-months' period ending December 31, 1924

April 1, 1924, Balance due Crocker National Bank..... $ 3,897.97

Receipts:

Dues	$ 798.25	
Charles Crocker Scientific Fund Endowment Income	1,268.60	
James Lick Endowment Income	51,055.12	
General Income	13,220.97	
John W. Hendrie Endowment Income	675.00	
Publications	171.55	
Interest	377.44	
Ignatz Steinhart Trust Interest	502.05	
U. S. Treasury Certificates	3,000.00	
Bills Receivable, Ignatz Steinhart Trust.	3,000.00	
W. G. Wright Fund	10.00	
Post Card Sales	950.92	
Wild Life Protection Fund	133.33	
Henry M. Holbrook Fund	2,000.00	
Sundry Accounts	705.02	
		$77,868.25
		$73,970.28

REPORT OF THE TREASURER—Continued

Expenditures:

Interest	$10,390.85	
Contingent Fund	304.14	
Salary Expense General	13,448.73	
Museum Department Appropriations	7,775.02	
Museum Department Salaries	9,330.00	
Publications	2,287.79	
Library	1,210.85	
Steinhart Aquarium Equipment	1,620.88	
Steinhart Aquarium Construction	74.60	
Sundry Creditors	10,105.05	
Expense	3,324.76	
Wild Life Protection Fund	89.91	
Notes Payable	10,000.00	
Insurance	426.09	
Grizzly Bear Group	28.47	
Holbrook Installation	178.53	
		$70,595.67

December 31, 1924, Balance with Crocker National Bank $ 3,374.61

M. Hall McAllister, *Treasurer.*

Examined and found correct,
McLaren, Goode & Co., *Certified Public Accountants.*
San Francisco, California, February 13, 1925.

INCOME AND OPERATING EXPENSES

For the period ending December 31, 1924

Income:		
Charles Crocker Scientific Fund Endowment Income		$ 1,268.60
James Lick Endowment Income		51,055.12
General Income		13,220.97
Dues		898.25
Interest from Temporary Investments		377.44
Profit on Post Card Sales		469.97
Total Income		$67,290.35
Expenditures:		
General Expense	$ 3,211.03	
Salaries	23,204.83	
Interest on Mortgage	10,390.85	
Insurance	427.69	
Total Expenditures		$37,234.40
Net Income Transferred to Surplus Account.		$30,055.95

SUMMARY OF SURPLUS ACCOUNT

December 31, 1924

Balance April 1, 1924		$415,648.63
Additions:		
Net Income for the nine months ended December 31, 1924		30,055.95
		$445,704.58
Deductions:		
Depreciation:		
Office Furniture	$ 206.90	
Commercial Building	7,752.27	
Museum Building	2,880.38	
Storage Cases	176.64	
Tools and Equipment	318.18	
		$ 11,334.37
Surplus, December 31, 1924		$434,370.21

IGNATZ STEINHART TRUST

December 31, 1924

Amount of Fund:		
Bequest from the Ignatz Steinhart Estate..		$250,000.00
Interest on Temporary Investments.....		55,477.70
		$305,477.70
Disposition of Fund:		
Steinhart Aquarium Construction.....	$263,390.29	
Steinhart Aquarium Equipment.....	23,713.33	
Temporary Investments:		
Bills Receivable.....	13,000.00	
Revolving Fund.....	5,000.00	
Uninvested Cash on hand.....	374.08	
		$305,477.70

BALANCE SHEET

December 31, 1924

Assets

Property:		
Real Estate, 831-833 Market Street	$600,000.00	
Real Estate, Jessie Street	8,083.65	
Commercial Building, 831-833 Market St.	516,818.66	
		$1,124,902.31
Museum, Golden Gate Park:		
Construction	192,025.92	
General Collections	144,178.73	
Library and Equipment	84,480.14	
Tools and Equipment	30,713.05	
Office Furniture	3,940.96	
		$ 455,338.80
Investment Securities		17,700.00
Ignatz Steinhart Trust:		
Bills Receivable	$ 13,000.00	
Steinhart Aquarium Construction	263,390.29	
Steinhart Aquarium Equipment	23,713.33	
Steinhart Aquarium Revolving Fund	5,000.00	
Uninvested cash on hand	374.08	
		$ 305,477.70
Current Assets:		
Cash in bank and on hand	$ 3,150.73	
Bills Receivable	5,000.00	
Sundry Accounts	127.50	
Post Cards in Stock (for sale)	1,252.10	
Foreign Exchange	36.84	
		$ 9,567.17
		$1,912,985.98

BALANCE SHEET—Continued

Liabilities

Endowments:		
James Lick Endowment	$804,902.31	
Charles Crocker Scientific Fund Endowment	20,000.00	
John W. Hendrie Endowment	13,600.00	
		$ 838,502.31
Ignatz Steinhart Trust:		
Ignatz Steinhart Trust	$250,000.00	
Ignatz Steinhart Trust Interest	55,477.70	
		$ 305,477.70
Alvord Bequest, Botanical		5,000.00
John W. Hendrie Endowment Income		3,375.00
W. G. Wright Fund		123.20
Wild Life Protection Fund		185.22
Ducks of the World Fund		100.00
Holbrook Fund		1,821.47
Reserve for Depreciation		71,171.71
Bills Payable		250,000.00
Sundry Creditors		2,859.16
Surplus		434,370.21
Total		$1,912,985.98

SUSIE M. PEERS,
Assistant Acting Secretary,
Board of Trustees.

We have examined the foregoing Balance Sheet, together with the books and accounts of the California Academy of Sciences, and, in our opinion, it is properly drawn up so as to exhibit a true and correct view of the Academy's affairs, as shown by the books.

McLAREN, GOODE & CO.,
Certified Public Accountants.

San Francisco, California,
February 13, 1925.